Populations living in risk zones:

socio-psychological prevention and rehabilitation

Conceptualisation of UNESCO Experience

in its contribution to

Chernobyl disaster's mitigation of consequences

with

Communauty Centres of Psychological Rehabilitation in Belarus, Russia and Ukraine.

United Nations Educational Scientific and Cultural Organization

UNESCO CHERNOBYL PROGRAMME

DONORS LIST

Designing and Implementing Measures to Address Socio-Psychological Impact produced on Populations in the Aftermath of Natural and Technological Disasters

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GOALS

I. Project background

- 1. In the Twenty-ninth Session of the General Conference (1997), the Draft resolution proposed :
- « To continue activities relating to the study of the scientific, educational, cultural and social aspects of natural disasters and technology-induced catastrophes, to assist in preventing them and minimizing their consequences within the framework of a new multidisciplinary project
 - « UNESCO action within its fields of competence in favour of population groups affected by natural disasters and technology-induced catastrophes. »
- 2. To harness the Organization 's expertise to those ends, in particular by monitoring and co-ordinating projects begun under the UNESCO-Chernobyl Programme now being concluded. »

Explanatory note

- 3. The UNESCO-Chernobyl Programme, begun in 1991, has essentially achieved its goals, and has produced significant and positive results. In this connection, it is proposed, using the experience gained during the implementation of that programme, to establish a broader multidisciplinary project « UNESCO action within its fields of competence in favour of population groups affected by natural disasters and technology-induced catastrophes. »
- 4. Such a project would be devoted to the study of the scientific, educational, cultural and social aspects of such calamities, and, within UNESCO's fields competence, to assisting in preventing them and minimizing their consequences. In the initial stage of implementation of the proposed project, it might also be possible to ensure that the projects begun under the UNESCO-Chernobyl Programme are completed.

Objectives

- 5. In accordance with the last Conference's resolutions, the experience UNESCO acquired with Chernobyl has to be systematised, in order to develop a methodological aid. This project is intended to elaborate a prevention support in order to work with rescuers and population in risk situation. We must be able to take capacities of response into account where the socio-economic conditions make risk and crisis management difficult.
- 6. Therefore, by this synthesis, we must be able to work upstream and below, in natural or technological risk situations. Considering the particularity of UNESCO suggestions for the various countries concerned by the disaster, we can take the dimension of this plan's cultural disposition into account.

II. Various aspects of the crisis following Chernobyl catastrophe

- 7. Chernobyl catastrophe confronted us with a problem of crisis management. A crisis, whose temporal and spatial limits stayed indefinite. Which were the ecological and sanitary consequences? Which were the various zones affected by radioactive pollution? To what degree? At last, are there any psychological or social effects / incidences for the population?
- 8. In a geopolitical group, affected by big transformations, management of nuclear catastrophe's consequences had to be repositioned in countries after the USSR explosion. The various countries concerned appealed to international assistance / help.

It is a matter of wondering about what management of catastrophes has to consist of. Which are the various structures which have to be set up for an efficient response? However, protection does not only rest on a capacity to respond to disaster.

- 9. Populations affected by the natural or technological risk constitute the central point of the system. They must be informed about the incurred risks. They must set up way of thinking and action in the conditions they will have to face. They must be taught vital gestures. They must educate children who live in contaminated aeras.
- 10. At first, in order to understand the consequences of this disaster, it must be put back in the organisational and structural context which it took place in. This ex-USSR's energetic politic faced the first accident of this range. It had to face management of a new type of crisis, handicapped by heavy structures, and a lack of informative culture.

Silence weight, misinformation, and a militarist-technocratic group will blast the credibility of this system in a short term.

- 11. Nuclear accident has a huge incidence on politic of states. It contributed to ex-USSR's destabilisation. Indeed, throw the debate it establishes, and economical scientific interests it represents, it's facing notion of democracy.
- 12. Results of this catastrophe are notable in every sectors.
- Social and sanitary consequences, now and there, but all over the world also, for a variable time scale, according to the nature of products spread out.
- Economic and cultural losses.
- Disappearance of local cultures, heir to ancestral skills...

13. Information

Response consisting in the information isn't enough to qualify what a « right information » is. Multiform and overabundant, this information serves as a vehicle for rumours and excesses calling political destabilisation.

14. The humanitarian consequences of the Chernobyl catastrophe: Status of victim means moral responsibility and with economical incidences -notion of compensation- in relation to a damage caused to a population.

After Chernobyl disaster, political decisions had to be taken, according to the

contamination map.

15. Varied compensations, such as pensions, free care and medicine, stay abroad for children, were received by victims - victims such as evacuees, population whose health had been affected, population living in contaminated aeras...

We can note the ambiguity of this status: in a society with economic troubles, payment of these pensions is even more guaranteed than salaries indeed. These compensations make people affected by Chernobyl seem to be favoured.

- 16. The concept of Centres of socio-psychological rehabilitation :
- UNESCO Centres work with a population who has to face something which never had been thought. The psychological rehabilitation structures were conceived to face a new problem: a population's feeling of helplessness. A population forced to leave its living environment, worried for its health.

In these Centres of socio-psychological rehabilitation, psychologists, social workers, managers, day-care people... organise activities and treatments to the affected population to revive its social and psychological abilities.

17. But with political, economic-social evolutions we know, we could see that these centres could become **development centres**. Informative places, with a varied population which would find there, a structure allowing it to meet, to exchange, to rediscover its traditions, its history. In the same time this population would be able to position itself in the social transformations which are occurring now.

III. Historical Context: The three countries analysis

A. Belarussian analysis

Historical context : the Chernobyl disaster. Mitigation of the consequences in socio-political context of the former USSR

18. The 26th of April entered into the world history as a tragic one for many millions of people in the three Slavic countries: Russia, Belarus and the Ukraine...

The ever largest in the human history man-made catastrophe took place during the night on the 26th of April, 1986 at the Chernobyl nuclear power plant (Ukraine). The scale and the nature of the Chernobyl catastrophe, which led to the wide-scale contamination of the environment, took the national authorities aback. There were no special instructions for such serious accidents and the radiation protection criteria were incomplete.

- 19. The Governmental Commission of the USSR Council of Ministers and the USSR Ministry of Health were co-ordinating application of protective measures in April-May 1986.
- During the first months after the accident there were measures taken to prevent spontaneous chain reaction in the nuclear power plant and to reduce the release of radionuclides. Primary evaluation of the contaminated zones was carried out after evacuation of people and cattle from the 30-km zone around the reactor. There were measures taken to prevent contamination of water resources.
- 20. Out of other decisions that were made at the level of ministries and institutions of the USSR, as well as out of those adopted by the Governmental

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Commission, there were the following:

- May 3, 1986 – the USSR National Committee on Radiation Protection adopted temporary permissible norms for iodine content in drinking water and other foodstuffs, which were reconsidered by the USSR Ministry of Health on May 6 and 30, 1986.

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- 21. May 12, 1986 the exposure dose limit was set up for general population as 5000 mSv/h and for children under 14 and pregnant and breast-feeding women as 100 mSv/h.
- May 22, 1986 (ten days later) the dose limit was set up as 100 mSv/h for general population.
- May 7, 1986 the USSR Ministry of Health approved the temporary permissible levels of radioactive contamination of premises, means of transportation, clothing, skin, etc., which were reconsidered on October 26, 1986 and minimised.

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- 22. Stable iodine was administered on May 2, 1986 for the evacuated population and was not given out for the rest of the population.
- May 12, 1986 the BSSR Ministry of Health and the BSSR State Agro-industrial Committee adopted the "Temporary norms of permissible content of radioactive substances in drinking water, foodstuffs and fodder".
- July 1986 the NCRP approved "Methodical principles of calculation of the levels of external and internal exposure of population residing on the territories contaminated by the radioactive products of accidental releases of the Chernobyl NPP".
- 23. All above mentioned highlight the uncertainty and complexity of the decision making. The information on the accident was rather scarce and responsible people faced serious political pressure, which could be partially explained by the perception of radiation threat in the society. In such conditions, the actions which were undertaken often were inadequate.
- 24. As the fate willed, the heaviest burden of the sequels of the catastrophe fell upon Belarus.

The Republic of Belarus is an independent country in the Western Europe, one of the 15 former republics of the USSR, which regained its independence in 1990. It is characterised by the area of 207600 km² with the population of 10215000, which basically comprises Belorussians and Russians. There are two state languages in Belarus — Belorussian and Russian with two dominating religions, such as the catholic and the orthodox. Belarus borders with the Russian Federation, Ukraine, Poland. Lithuania and Latvia.

- 25. About 70% of all radioactive substances that were released during the reactor accident fell on the territory of Belarus. At the same time 23% of the Belarus territory became contaminated by Cs-137 as a result of the release. That territory was inhabited by more than 2 million people. We were forced to exclude from economic use more than 6000 km² including almost 3000 km² of arable lands.
- 26. Compare: The caesium-137 contamination of Ukraine over 37 kBq/m² amounted to 5% of the territory of the republic, for Russia 0.6% of its territory.

During the years after the accident, 133.7 thousand people have moved or have been resettled from contaminated territories. In total, 415 settlements have been settled out in the republic.

- 27. Before 1991 practically all expenses related to mitigation of the consequences of the accident were covered by the Soviet Union. After the USSR collapsed all the burden of the consequences laid upon the shoulders of the Belarus citizens.
- 28. By the time of the Chernobyl accident, the USSR legislation and that of the Union's republics' did not have normative acts to regulate legal relationships in case of natural and man-made disasters. Owing to this, all the work on liquidation of the Chernobyl consequences in Belarus was co-ordinated by a working group established in the Council of Ministers and chaired by the Deputy Chairman of the Council of Ministers. By its initiative and with its direct involvement a system of top priority measures was developed and implemented to protect public health and establish normal living and working conditions, improve services in the contaminated areas for the population affected by radioactive contamination.
- 29. In order to ensure public safety there was a decision made on April 28, 1986 to evacuate pregnant women and children from settlements located in the most affected regions. Children under 14 years old and pregnant women were evacuated from 25 settlements by May 1, 1986.

On May 4, 1986 the Council of Ministers of BSSR issued an Order on the expansion of the relocation zone of the Chernobyl NPP up to 30-km and on urgent measures on housing of the people.

30. On May 5, 1986 the Council of Ministers of BSSR issued an Order on the financial support of citizens temporary resettled due to the Chernobyl NPP accident.

The Decrees of the Council of Ministers of BSSR as of May 8 and May 16, 1986 defined the conditions of pay off and financial support for the workers of the Chernobyl NPP zone and additional measures on liquidation of the Chernobyl NPP accident consequences.

31. On May 28, 1986 the Council of Ministers of BSSR issued an Order on additional relocation of citizens from the Chernobyl NPP zone.

By the end of 1986 the Council of Ministers of BSSR and the Central Committee of the Communist Party of Belarus adopted 26 documents related to the liquidation of the Chernobyl NPP accident consequences, in 1987 – about 50 such documents. Some tens similar documents were annually adopted until 1991.

- 32. In 1988 the United Nations Organisation recognised the planetary nature of the Chernobyl consequences not as an accident only, but as a global radiation and ecological disaster, focusing attention of the world community on the most pressing needs of the people affected as a result of the Chernobyl disaster as an international humanitarian tragedy with the long-lasting impact.
- 33. On October 26, 1989 the 12th session of the Supreme Soviet of BSSR

approved the 'State Programme on Overcoming the Consequences of the Chernobyl NPP Accident for 1990-1995 and for the Period up to 2000' and on February 22, 1991 the session approved the Law "On Social Protection of Citizens Affected by the Chernobyl Nuclear Power Plant Catastrophe".

- 34. On July 19, 1990, the Supreme Soviet of the Belorussian SSR declared the republic to be a zone of national ecological calamity. The same year it was decided to establish the State Committee on the Problems of the Chernobyl NPP Catastrophe Consequences (Belarus' State Chernobyl Committee) responsible for co-ordination and control over the activity of all bodies involved into overcoming the Chernobyl NPP consequences in Belarus.
- 35. The Republic of Belarus implements a consistent state policy aimed at overcoming the Chernobyl catastrophe consequences. The work on overcoming the Chernobyl consequences is based on the Laws of the Republic of Belarus "On Social Protection of Citizens Affected by the Chernobyl Nuclear Power Plant Catastrophe" and "On Legal Regime of Territories Contaminated as a Result of the Chernobyl NPP Catastrophe" as well as on the decisions made by the President and the Government of the Republic of Belarus.
- 36. Despite the deficit in the state budget induced by the status of the economy of the republic, the Government allocates up to 10% of the budget annually to mitigate the consequences of the Chernobyl catastrophe in Belarus. This is a huge amount of money but it is insufficient to cover the whole complex of problems generated by the Chernobyl catastrophe.

The practical activity on implementation of the state programme is focused on a human being.

- 37. The basic directions of work on overcoming of the Chernobyl consequences are as follows:
- reduction of external exposure dose;
- reduction of internal exposure;
- economic rehabilitation of the contaminated territories:
- social protection and medical assistance;
- socio-psychological rehabilitation.
- 38. Negative factors of the Chernobyl catastrophe, which are significant for human health can be divided into two groups as follows: radiation-based, directly related to the influence of ionising radiation of isotopes of iodine, caesium, strontium and other radionuclides and non-radiation based, related to changes in habitat and prolonged psychological stress.
- 39. During the years after the accident 133.7 thousands of people were resettled from the contaminated territories of Belarus. Activities on resettlement of people have been practically finished by now. Such a number of the resettled people makes it possible to refer to the Chernobyl accident as a humanitarian tragedy, which led to emergence of the new category of refugees ecological ones.
- 40. By the number of refugees only wars can be compared to the Chernobyl disaster. Houses and flats, schools and pre-school institutions, hospitals have been

built; roads, water and gas mains and networks have been constructed for those who were resettled.

- 41. The agricultural sector of economy suffered the highest damage from the catastrophe: 54 collective farms and sovkhozes were liquidated. The Chernobyl catastrophe has affected all spheres of the man's vital activity production, culture, science, economy and etc.
- 42. Two hundred and sixty-four thousand hectares of agricultural lands have been excluded from agricultural turnover. These lands will be returned into economic activity as the radionuclides will be fixed in soil and as the natural half-decay of radionuclides goes on. For this purpose, the Council of Ministers adopted a document that regulates the order of introduction of such lands into economic activity. For the last four years, more than 14 thousands hectares of usable lands were returned to agricultural use.
- 43. Taking into account the importance of the problem the amount of investment into this direction of work increased for the last years from 1 to 8 percent of the amount allocated for mitigation of the catastrophe consequences.
- 44. A problem of "cleanness" of foodstuffs produced in the private sector remains acute. Approximately in 500 settlements, milk is periodically registered with contamination exceeding permissible levels of content of radionuclides. Traditional foodstuffs, such as forest gifts (berries, mushrooms), river and lakes fish do not meet suggested norms either.
- 45. A special priority is given to the solution of the problem of radiological quality of meat-and-milk products in private sector. Each settlement, where the contaminated milk was registered, is allocated financial resources to lay out cultural pastures and hayfields. They are also supplied with caesium-binding boles and combined fodder with ferrocyanide. Their use provides reduction of caesium-137 content in milk and meat by factor 3 to 5.
- 46. A lot of work is being done on implementation of the programme of rehabilitation of settlements. A decision was made that settlements, located in the zone of subsequent resettlement, have a perspective of future development and people can live there as suggested by radiation factor. This fact made up a legal basis for implementation of a complex of measures in such settlements and provision there certain conditions for residence. Such decision was also based on a categorical refusal of the significant part of villagers to move to other regions and districts for residence.
- 47. Decontamination is carried out on socially important territories, such as kindergartens, schools, etc. in order to reduce the external exposure doses. More than 290 objects, 529 ventilation systems at 23 enterprises have been decontaminated since 1990. One hundred and ten settlements have been demolished.
- 48. <u>Medical consequences</u> of the Chernobyl NPP catastrophe are the subject of close attention of the medical community of the whole world. This is explained by the

fact that radiation impact on the republic related to the Chernobyl catastrophe does not have similarities in the world neither by its nature, nor by its scale. First of all it is characterised by multi-component and prolonged influence of ionising radiation, aggravation of radiation effects by different factors of social, psychological and anthropogenic nature.

- 49. During the post-accident period and out of the whole complex of dose forming radionuclides and exposure pathways, the main input into the exposure dose of the population of the republic has been made by:
- internal irradiation by short-lived radionuclides of iodine and tellurium (mainly iodine-131);
- external irradiation by radionuclides deposited onto the soil surface;
- internal irradiation by long-lived radionuclides ingested with contaminated foodstuffs.
- 50. Radiometric measurements showed that the most exposed group of people is children and teenagers, especially children under 7 years old. The highest exposure doses were also observed in participants of the recovery work, the so called liquidators of the consequences of the accident, as well as in citizens evacuated from the 30-km zone of the Chernobyl NPP in 1986.
- 51. Before 1993, the demographic situation in the republic was characterised by growth in the total number of the population. During the following years the number of the population was decreasing. A characteristic is a decrease in the share of rural population. In general, the structure of the urban population of the republic, as well as the structure of the Mogilev and Gomel regions can be characterised as progressive. The structure of the rural population can be characterised as regressive, since the number of the old aged citizens is higher than that of the children.
- 52. In the group of population <u>residing in and resettled</u> from the territories with the level of radioactive contamination by Cs-137 higher than 555 kBq/km² one can observe increase in morbidity and mortality indices on all classes of illnesses. The most frequently observed diseases are diseases of bronchi and lungs system, blood circulation system, digestion, nervous and endocrine systems, as well as perception organs.
- 53. Their morbidity index exceeds the average in the republic in 2.1-9.8 times. The post-accidental period is also characterised by increase in thyroid cancer cases and other types of thyroid gland illnesses. Similar frequency in pathologies is observed in the population inhabiting the territories with Cs-137 contamination level of 37-555 kBg/m².
- 54. There are certain changes observed in the structure of <u>oncological morbidity</u>: specific number of stomach tumours has reduced, there is a significant increase in the frequency of diseases of thyroid gland, respiratory organs, mammary gland, urogenital organs, colon, rectum and others.
- 55. The Chernobyl catastrophe impact on the increase of thyroid gland morbidity rate is indisputable. Significant increase in thyroid cancer cases in children and teenagers is registered in the republic mainly in the Gomel and Brest regions. This is

stipulated by the doses on thyroid due to radionuclides of iodine in the first period after the accident, endemic disease of goitre, incorrect administration of stable iodine, etc.

- 56. A special system of medical assistance to the affected population has been developed and introduced in the republic in order to provide permanent control over the health status of more than 2 million people (liquidators, citizens residing on the contaminated territories and resettled from such territories). This task is implemented by local medical and prophylactic establishments, by special medical brigades and ambulance personnel, who work on the contaminated territories on a term basis, and by specialised institutions.
- 57. Since 1993 the Belarus State Register on the individuals, affected by radiation in the consequences of the Chernobyl accident has been maintained. It includes data on more then 187 thousand individuals as follows:
- liquidators;
- evacuees or those who left the evacuation zone on their own after the Chernobyl catastrophe;
- 58. residents or workers in the zone of primary and subsequent relocation as well as those resettled from mentioned zones or those who left them on their own after the accident;
- children of the individuals in the groups mentioned above;
- residents or workers in the zone with the right for resettlement and the zone of periodical radiation control as well as the residents from the settlements with an average exposure dose equivalent higher than 1 mSv/y;
- 59. participants of recovery work after the accidents on other military or civil nuclear installations or those who are affected by the consequences of such accidents, or in the result of nuclear tests, exercises and other work related to any type of nuclear installations including nuclear weapons.
- 60. Measures on social protection of the affected population depend on the doses received by population and the level of contamination of their residential area and working place.
- 61. The scope and focusing of measures on social protection of liquidators of the consequences of the Chernobyl NPP catastrophe are conditioned by the characteristic of the work of the liquidators and the degree of risk they were exposed to during the first days of the accident. Measures aimed at reduction of the negative health effects of radiation occupy the leading role within the scope of measures on social protection.
- 62. In accordance with the Law of the Republic of Belarus "On Social Protection of Citizens Affected by the Chernobyl Nuclear Power Plant Catastrophe", sanatorium treatment of the affected population has been organised in the republic. In 1997 the transition to the state system of rehabilitation and sanatorium treatment of population was performed.
- 63. The Ministry of Emergencies runs the system of rehabilitation and recuperation

centres for the population affected by the Chernobyl catastrophe and first of all for children and teenagers. By now there are six such centres operated and it is planned to shortly commission 4 new centres. Upon commissioning the centres, the total number of places in the centres of the system of the Ministry of Emergencies will reach 2294 thus enabling efficient rehabilitation of about 32 thousand affected people annually.

- 64. Three **Centres of Social and Psychological Rehabilitation** were opened in Belarus within the UNESCO-Chernobyl Programme. The centres are located in the villages **Pershai**, **Streshin** and in the clinic of the Scientific Research Clinical Institute of Radiation Medicine and Endocrinology "**Aksakovshina**". Specialists and associates of these centres work individually and in groups with more than 48 thousand people annually, 80% of which are children and teenagers.
- 65. The Chernobyl catastrophe gave numerous lessons including such as increase of safety in nuclear reactors operation; development of criteria for mitigation of nuclear accidents consequences; interaction with the mass media, treatment of patients exposed to radiation; methods of monitoring; better understanding of radio-ecological processes; agro-industrial production in conditions of radioactive contamination and others.
- 66. The Chernobyl catastrophe made people realise the necessity of establishment of normative and organisational basis for nuclear and radiation safety in the Republic of Belarus that would correspond to international requirements. Thus, in particular, in January 1998 a Law of the Republic of Belarus "On Radiation Safety of Population" entered into force.
- 67. An important Chernobyl lesson is also the understanding of the fact that a large scale nuclear accident leads to problems that go far beyond the state borders, and its consequences directly or indirectly influence different countries, which could be far away from the place of the accident. This led to development of activities aimed at enlarging and strengthening of international co-operation in all areas and fields related to the consequences of the Chernobyl catastrophe.
- 68. The Chernobyl disaster gave a new impetus to research in the nuclear safety field and pushed national authorities and experts to radical reconsideration of their understanding of radiation safety problems and emergency response in case of a nuclear accident.

B. Russian analysis

69. From the very first day, the accident at the Chernobyl Nuclear Power Plant drew the attention of the world community. The citizens of the USSR learned about it a few days later. Mass media gave a brief information only on April 28, 1986. The scale of the catastrophe and measures taken for the elimination of the consequences were partly secret, and on the whole hardly available for the population. Several years later, an avalanche of alarming information about the consequences of the accident fell on the population.

- 70. In 1991, a Law of the Russian Federation «On the social Protection of the Population Affected by Radiation Resulted from the Accident at the Chernobyl NPP » was adopted, and a special body of state control, the **State Committee**, now transformed into **EMERCOM of Russia**, was organised. On the basis of the Law, the State Program on Protection of the Population of the Russian Federation against the Impact of the Consequences of the Chernobyl Catastrophe for 1992 to 1995 and for the interval up to 2000 was developed.
- 71. In present time State Program on Protection of the Population of the Russian Federation against the Impact of the Consequences of the Chernobyl Catastrophe for 1998 to 2000 is implemented. In addition, two special programs are implemented: « Children of Chernobyl » and « Dwelling for Liquidates ».
- 72. The State Program incorporates a wide range of measures for the social protection of the affected population, development of health services on the contaminated territories and providing special medical aid, environmental monitoring and exposure doses, activities for reducing radiation commitments, including measures taken in farming and forestry, sanitary restrictions, social and psychological and economic rehabilitation of the population and territories.
- 73. Since 1994, the Government of the Russian Federation charged the EMERCOM of Russia with co-ordination of activities on overcoming the consequences of the Chernobyl Accident.

The following bodies take part in the implementation of the State Program: Ministry of Health and Ministry of Agriculture, Federal Service of Russia on Forest Economy, the Russian Federal Service for Hydrometeorology and Environmental Monitoring, Ministry of Education, Russian Academy of Sciences and others. Partly, this work is carried out by the local administration at the expense of the State Program.

- 74. Inspite of the difficult economic situation, the Russian Government allocated large funds. In 1992-1995, the Government spent 9 trillion roubles for the works on overcoming the consequences of the accident, and, in accordance with the Law, 5 trillon roubles were paid as compensations(the total sum exceeds 3 billion dollars). In 1996-1998, Government spent 750 million roubles.
- 75. A lot of events took place after Chernobyl accident. Unfortunately, fatal natural and man-made disasters, like earthquakes in Armenia and Neftegorsk, and the railway crash near Ufa, took lives of dozens of thousand people. But unlike other emergency situations, the problem of the Chernobyl people liquidators, evacuated and resettled population, and the residents of the contaminated territories -became a part of our life.

The accident at the Chernobyl nuclear power plant occurred on April 26, 1986 was a major technogeneous and humanitarian catastrophe of the twentieth century.

76. Radioactive contamination affected the territories of 19 subjects of the Russian Federation with a total population of over 30 million people. The area of these territories contaminated with Cs-137 densities above 37kBq m-2 was more than 56 thousand km2, about 3 million people live in the contamination zone.

Radiation monitoring of the territories started from the very first day after the accident.

- 77. The first maps of radioactive contamination were obtained by May 10 (I-131, Cs 137). Over 6 million square kilometres have been examined. Aerial gamma-radiation surveys and ground investigations have allowed to prepare and publish contamination maps of the European part of Russia contaminated with Cs-137, Sr-90, and Pu-239. By now, information on radioactive contamination levels in about 13,000 settlements located in 23 administrative subjects of the Russian Federation is available.
- 78. Immediately after the accident, hundreds of thousands of citizens of the USSR were involved in emergency actions and clean-up operations, including 200,000 people from Russia.

C. Ukrainian Analysis

Chernobyl Catastrophe

- 79. According to the USSR Council of Ministers Resolution (29.09.1966), the program of putting into operation the Nuclear Power Plants of 11.9 mln. kW. during 1966-1977 was approved. It is equipped with nuclear reactors of a new type RBMK-1000 of 8 mln. KW. power.
- 80. It was decided to construct one of the new NPPs in the eastern part of Belarussian-Ukrainian Polissia, about 110 km to the North of Kiev and 12 km to the north-west of Chernobyl (Kiev region). Since 1970 the construction was carried out by the trust Pivdenatomenergobud of Energetic Ministry of the USSR.
- 81. The first power unit was put into operation in September 1977, the second one in January 1979, the third and the fourth one in December 1981 and 1983, respectively. The latter ones were of the second turn and belonged to the second generation of the NPP type. The worth is that no attention in the ChNPP construction was paid to some geological, geographical, ecological and social factors, that had been more than one emphasised in numerous appeals by the Ukrainian Academy of Sciences to different authorities.
- 82. Long before the third and fourth power units were put into operation, the idea to construct the fifth and sixth power units (that is to say, the third ChNPP turn) had emerged. Construction and assembly work that had begun in 1981 were finished.
- 83. The IV unit of the Chernobyl Nuclear Power Plant was commissioned in December 1983. By the time the unit was laid up for intermediate maintenance due to start on April 25, 1986, the core contained 1659 Fuel Assemblies with the average burn-up of 10.3 MW. day/kg (approximately 45% of calculated complete burn-up). The bulk of the Fuel Assemblies (75%) represented the first charge assemblies with the burn-up of 12-15 MW.day/kg.
- 84. Run-down testing of turbogenerator n° 8 aimed at the experimental examination of the possibility to use the rotor mechanical energy for internal needs of the unit, when its power supply is cut off of that planned before the reactor shutdown. Similar tests were carried out at the plant, but at that time the voltage in the

generator trunk dropped faster than the rotor energy consumption. During the trial set up for the 25th of April it was suggested to use an especially designed generator magnetic field regulator that was to remove this shortfall. With proper test regime and security measures, such tests at the NPP were not prohibited.

- 85. However, the program of turbogenerator trials was not prepared and coordinated carefully enough, i.e. it did not envisage additional safety measures and, moreover, it proposed locking off the Emergency Cooling System of the Reactor (ECSR).
- 86. It is well known what happened later. According to the eyewitnesses who were outside the power unit n° 4, at about 1.24 a.m. there were two successive explosions, burning bits and sparks flew up over the unit, and some of them falling onto the turbine hall roof, cause its kindling and fire.
- 87. Radionuclide release beyond the Chernobyl NPP emergency unit premises was a long process that includes several stages. First, there was a release of the dispersed fuel from the destroyed reactor.
- 88. During the second stage that lasted from April 26 till May 2, the release rate gradually decreased, due to the measures aimed at filtering released substances and ceasing the graphite burning.

The third stage was characterised by a rapid increase of fission product escape beyond the destroyed unit premises, which originated from the core fuel heating due to residual heat.

The fourth stage, the last one, which started after the 6th of May, was characterised by a rapid effluent decrease.

- 89. The control over the radiation situation was carried out directly by the service of external dosimeter and the sub-unit of the Plant Civil Defence. But neither the ChNPP administration, nor higher administrative bodies received objective information during the first hours of the catastrophe owing to bad readiness of the above services.
- 90. The map of radiation levels for all the European territory of the country was drawn, basing on the results of air photography carried out from April 30, till May 7,1986.

The results of daily air photography and measurements formed the basis for a generalised map of EDR a gamma radiation which was prepared by May 10, 1986. This map served supported the process of evacuation of population.

- 91. Immediately after the accident the question arose about the danger of the molten reactor Fuel Containing Mass penetrating into the bubblier pool which was filled with water, that could lead to formation of detonating mixture and new explosions.
- 92. The decision to effect complete and immediate removal of the water at once, involved such points as investigation of premises and structures of the bubblier pool,

searches of an optimal scheme of work, and elaboration of the design, as well as laying pipelines and pumping out of the radioactive water. All the preliminary work was done during some hours.

- 93. By the morning of April 26, the approaches to the town of Prypiat and ChNPP were put under militia control, excepting the borders of 30 km zone that did not coincide with the disposition of the militia posts, those who became the base for dosimetric monitoring posts.
- 94. This fact complicated the works for preserving the environment from contamination by radioactive substances from the zone. Motor transport was the cause of the most dangerous situation in spread of the radionuclides outside the zone. Radioactive dust, dirt and soil were carried on tyres and running parts of the vehicles.
- 95. The builders had erected the main structures for the units of rapid sanitary processing in 5-6 days, under an extremely complicated situation, and in a week they had created special radiation protection constructions.
- 96. In consequence of the above measures on May 25, the objects were put into operation, and the normal way of transportation of loads and people in the situation of emergency, was organised on all the roads, leading to the ChNPP. Conditions for work of the operating staff at the units of rapid sanitary processing were reestablished.
- 97. It was necessary to prevent in the exclusion zone outlet of the sewer waters into the Prypiat river and Kiev water reservoir, and not to permit the radionuclide washing of with spring floods, to avoid rising of the ground-water level at the industrial site of the ChNPP and under the destroyed unit, as well as to overtake filtration of the radioactive water from the cooling pond into the river Prypiat.
- 98. Draining of the rain sew of Prypiat city into the cooling pond instead of the river, was transferred. With this aim, six wells were bored at the 4 km long sewer was laid. The embankment dams (3 km) were constructed on the right side of the Prypiat river.

The wind distributed the radioactive releases over the territory of Ukraine, Belarus and Russia. The first current of radioactivity and the radioactive cloud were divided into two parts and moved in two directions - to the West and to the South.

- 99. Three days later, on April, 29 1986 the wind turned to the South and the radioactive cloud began to move towards Kiev. By that time the power of releases from the reactor has essentially fallen (approximately five times in comparison with April, 26, 1986.)
- 100. When the power of releases rose again after the 2nd of May the wind direction changed to the south-west, then north-west and to the North. Such directions of the wind brought as a result diminishing of the radiation attack during the first 10 days after the accident in Prypiat', Chernobyl and Kiev, compared to that theoretically possible. Unfortunately, some of the settlements situated to the South and East of

the ChNPP turned out to be in the zone of hard radiation. The contamination of Ukrainian, Belarussian and Russian territories conventionally can be divided into three traces: Northern, Western and Southern.

101. The accident of April, 26th 1986 almost completely destroyed the IV unit reactor of the Chernobyl NPP.

In the very first days after the accident, the new problem arose connected with building of a structure that could protect adjacent areas from spreading radiation and prevent radionuclide release from the destroyed reactor.

- 102. In order to provide measures of great importance for the Elimination of the Accident Consequences, it was necessary to mobilise considerable resources, as well as to involve practically all the Ministries and departments, many of Scientific Institutions, including those from the Ukrainian Academy of Sciences.
- 103. The main tasks of the Governmental commission were: to determine scale of the accident, to elaborate and carry out the measures aimed at localisation and overcoming of the accident consequences, to effect health protection and render possible medical aid to population, to study in details the catastrophe causes and, on this basis, to work out operational and long-term measures aimed to prevent such accidents in the future.
- 105. The very first conclusions of the Governmental Commission as well as evaluations of scientists and specialists defined extraordinary character of the accident and also probability of hard medical and ecological consequences of the catastrophe. A number of extremely complex problems sharply arose before the Government of the Country. The real situation forced implementation of immediate wide scale measures with involving of all-country economical, scientific and technological potential and precise co-ordination in actions of the All-Union and Republic authorities.
- 106. Within the most difficult period after the accident the meetings of the Operative Group were hold almost daily. As well as leaders of local authorities, scientists and specialists took part in the work.
- 107. About 400 different questions were enlightened at the meetings of the Operative Group that had to work on scientific measures to localise the accident's seat, render medical and sanitary aid for population, to accommodate and give a possibility of work for people evacuated from the dangerous areas, besides to reduce consequences of radioactive contamination.

In spite of the strenuous work during 1986-1987 directed to minimise the Chernobyl accident consequences, to assure complex planning of measures, to improve coordination of the actions connected with putting in action of the above measures.

108. By the instructions of the USSR Government the packaged long-term programs on the elimination of the accident consequences on the territories of Ukraine, Belarus and Russia, were already carried out by the corresponding Councils

- of Ministers in September-October, 1989, taking into consideration gained experience and obtained new scientific facts.
- 109. After the USSR disintegration in December 1991, the hard situation emerged. Ukraine appeared to be face with all the problems concerning the catastrophe of planetary scale. Thus, all the responsibility for localisation of the consequences, the ChNPP servicing, transformation of the destroyed IV power unit into the ecologically safe system and the expense fell onto Ukraine to a considerable extent.

PART 1- Dynamics of socio-psychological situation during post catastrophe period

Information issues

- 110. The Chernobyl Nuclear Power Plant disaster has become not only the largest in scale technogenous environmental catastrophe that affected the fates of millions of people; it also played a unique role in socio-political life of the former Soviet Union as an event which has put to test budding democratisation and openness processes. Its political aspect is worth emphasising.
- 111. People residing dozens and hundreds of kilometres away from Chernobyl learned about the disaster through radio broadcasts coming from the countries that were believed to be far from friendly to the USSR. "Why was it not my, but some other government that has warned me of the danger?" such is the question every person would willy-nilly ask.
- During the first days the information about both the fourth power unit explosion and considerable radioactive emissions was hushed down. It was explained to population that the evacuation was temporary and that the major preventive activities were damp cleaning and windows shutting.
- 113. April 28th, 1986 saw the first official statement made on radio and TV on Chernobyl disaster. The following day this information was carried by the newspapers.

All the official information about the disaster scope and consequences aimed at public was provided in small doses, with emphases shifted. More or less complete information would be classified as "Strictly confidential" or "For service use only". Experts involved in the study of the radiation situation would give written undertaking not to divulge the information received. Health care providers were forbidden to diagnose radiation disease. But it was hardly possible to conceal the actual state of affairs.

- 114. Ideological restrictions and redundant secrecy characteristic of that period prevented due coverage of the disaster actual aftermath by international and domestic news agencies. The state authorities took a decision to make public only a few TASS statements on our government's stand with respect to international assistance. This resulted in numerous obstacles and problems in terms of international co-operation, a lot of time was lost and a number of opportunities missed.
- 115. Lack of complete information exasperated the public and made it mistrustful of official sources of information and government officials. For this reason people would readily lend their ear to those who have been to "the zone", to people knowledgeable in radiation matters, as well as to mere rumours and gossip. It was only in spring 1989 that the official ban on making radiation contamination data public was lifted.

- 116. On April 30th, 1986 the USSR Ministry of Health made the decision to ban the consumption of milk coming from private subsidiary plots located in contaminated areas.
- On May 6th admissible radiation levels for drinking water and food produce were introduced. Local governments, however, did not make this information available to the public in time, the failure that resulted in larger radiation loads on thyroid glands.
- 117. The traditional *First of May* demonstration was held in 1986, too, due to lack of specific and objective information about the Chernobyl disaster scope and consequences.

The same lack was true for subsequent years as well until Spring 1989.

Publications would mainly focus on localising the disaster, and on human courage and stamina.

118. Budding democracy finding its way through totalitarian maze capitalised on Chernobyl events to awaken public national self-consciousness, and to make people reassess their role in the life of their country.

Even now, in the period of openness and glasnost, when all the restrictions on disseminating and using the Chernobyl data have been lifted, public mistrust of official information still lingers on. Democratisation of public life served as the turning point in the process of opening Chernobyl up.

- 119. Pushed into it by public pressure, the USSR Supreme Council adopted on April 25th, 1990 the Decree "On Unified Program for Eliminating the Consequences of the Chernobyl Nuclear Power Plant Disaster and the Aftermath Related to This Disaster". The Decree approved the State National and Republics Program of Urgent Activities for 1990-1992 on Eliminating the Disaster Consequences that did not depend on the 3.5 ber/year concept.
- 120. The majority of the population did not take the meaning of this act in the fact that engendered distrust of decisions taken and, coupled with changes in human life styles and with stress, caused public nervous state.
- 121. In late July and early August 1990 the Supreme Council session of the Ukrainian SSR discussed at length urgent measures to be taken to protect the Ukrainian population from the Chernobyl aftermath. Area contamination levels, as well as affected population data were quoted, and it was pointed out that some inadequate protection activities were implemented due to incomplete and fragmented information.
- 122. Deputy Chairman, Council of Ministers of Ukrainian SSR, made a report taking on the concept of "35 ber in 70 years of life" which certain Moscow scientists tried to impose; the report stated that Ukrainian and Belorussian scientists supported by their governments "have rejected it as not taking into account a number of important factors having substantial effect on human life and health".
- 123. Detailed discussion of this report resulted in the Supreme Council of the Ukrainian SSR classifying the 1986-1989 activities aimed at eliminating the disaster consequences as "inadequate". It also declared Ukraine to be an environmental

disaster zone. The session has adopted urgent measures on protecting the public from the Chernobyl disaster aftermath for 1990-1992.

- 125. The session materials have been published in detail in the Republic's mass media, they were broadcast on the TV and radio and became available to each and every person. In terms of the problems coverage, openness and focus the session materials were the most objective reflection of the Chernobyl disaster succeeding in drawing not only government, but also public attention to its consequences.
- 126. On August 23th, 1990 the Council of Ministers of Ukrainian SSR adopted Decree No.228 on resettling the residents of certain populated centres from contaminated areas. Lack of funding from the Union budget, however, slowed down the resettlement process.
- 127. On July 23th, 1991 the Ukrainian Cabinet of Ministers Decree No.106 came into effect, the list of populated centres belonging to radioactive contamination zones was approved, and the Procedure was established for keeping the population informed on radiation state in contaminated areas.
- 128. On August 31th, the Cabinet of Ministers of Ukraine passed a resolution establishing Population Information Centres in the Zhitomyr and Kiev oblasts dealing with eliminating the consequences of the Chernobyl disaster. It was instrumental in putting in place the public information support system, although not covering the whole contaminated zone.
- 129. The flow of varied information grew in scale. It was mostly published in special literature or in one or two sources only, and eventually became unavailable to the public and even to many professionals.

Due to lack of funding such literature was published in small numbers of copies and did not always find its way to public or specialised libraries.

130. As to periodicals, the information was presented there without any systemic approach, in limited scope and it was biased. As a rule, separate sensational, often dubious, facts and data would be featured in mass media without any explanation or comment

Mass media got imbued with such atmosphere which brought about continuous public socio-psychological tension and stress. This state to a certain extent is still there.

- 131. The analysis of the first Chernobyl reports in domestic mass media makes it possible to classify *this first stage as information vacuum*. The first statement of the Pripyat radio was broadcast 35 hours after the disaster, while the first incomplete information on the TV Central Channel was put on the air 68 hours after the event. This period is marked by hushing down the actual events, by withholding the information on radiation danger and on measures to be taken to reduce the radiation harmful effects to minimum.
- 132. **The second stage** can be defined **as information blockade** (April 28th to May 6th, 1986) with periodicals featuring isolated publications, mostly brief and government-controlled, which ignored the danger and the unique nature of the

disaster. The information on the territories of Belarus and Russia being contaminated with radionuclides was totally withheld. It is this stage that saw the communicative link "rumours-emotions" come into being which gave rise to uncertainty an depression among population, as well as mistrust of official information sources.

- 133. **The third stage** can be marked as **information breakthrough**, that is the beginning of large-scale coverage of the disaster various aspects in mass media (May 6th-May 15th, 1986). It originated with Ukraine's Health Minister's speech and came to a close with Mikhail Gorbachev's statement made over the Soviet TV. Over this period the public was fed utterly controversial information on the one hand, an attempt was made to downplay the meaning of the catastrophe, while on the other, an appeal was voiced to comply with strict precautionary measures.
- 134. **The fourth period** (May 15th, 1986 January 1987) can be defined **as information chaos**. It is characterised by a vast amount of information, often too confusing to make head or tail of it. Its termination was marked by setting up Information and International Relations Division aimed at sorting out and unifying reporters' stories.
- 135. **The fifth stage** can be called **the period of organised multichannel peak,** and it is marked by lifting the iron curtain before international press, by arranging interviews with prominent scientists and professionals, by semi-official review of the Power Plant state. It was characterised by government control over glasnost, by the attempts made by official health care and nuclear power sectors to justify themselves in public opinion. The first books of non-fiction and fiction made their appearance.
- 136. The sixth period dates back to March 1989 when radically new data were made public, such as contaminated areas maps, and when some confidential materials were first published. Ministries involved came under public criticism, discussions and debates got under way. The quantity of publications reduced with their quality improving; the Chernobyl developments were given more profound consideration resulting in serious scientific and popular publications.
- 137. Further on it was on strictly periodical basis that Chernobyl information made its way into mass media. The flow of publications would gain momentum on the eve of the disaster anniversary, subsiding drastically as soon as April was over. Similar information peaks would occur when Laws were passed guaranteeing the rights of persons affected by the Chernobyl or other power plants disasters, when international experts came to work here, etc.
- 138. Starting 1991, after the catastrophe fifth anniversary, a tendency towards stabilisation of emotional tension was noted, with educational publications making it to the foreground.

The dominant focus in 1992 was on public social protection, on the enforcement of Chernobyl laws, on privileges granting procedure.

139. 1993 saw the first glimpses of population socio-psychological adaptation to residing in contaminated areas. Calm intonations prevail in publications which are scientifically valid and aimed at reducing the disaster adverse effect.

Beginning 1995 sociologists observe the loss of public interest in Chernobyl-related issues with public attention shifting to more vital matters - survival under tough economic conditions.

140. Over the years that followed the highest peak marked the eve of the disaster tenth anniversary.

Over the past three years Chernobyl-related publications are featured virtually only in newspapers and journals specifically addressing this subject.

Political, Economic, Medical, Social and Cultural Consequences in Ukraine

- 141. The Chernobyl catastrophe happened at the first stage of the proclaimed in the USSR reorganisation and brought significant losses for economy of both the USSR and Ukraine as well as subsequent large natural and technogenic catastrophes. As the accident's consequences coincided with the economic and political crisis, it led to slowing down economic development rates in Ukraine from 1986, the production reduced too.
- 142. The consequences of the Chernobyl catastrophe influenced to a great extent the branch structure of the Ukrainian productive forces. Consequences of the catastrophe touched directly or indirectly all the branches of the national economy in all the regions of Ukraine.
- 143. More than 2.6 million persons in Ukraine (5% of the total population in 1986) were exposed to influence of internal and external irradiation. However, practically all the Ukrainian inhabitants were exposed to hard psychological influence, especially the population of the territories contaminated with radionuclides of the exclusion zone, zone of obligatory moving, zone of guaranteed voluntary resettlement and zone of persistent radiological control; that badly effected first on the health condition of children and persons of the most productive age.
- 144. Besides, it prompted the regulated and non-regulated migration of the population; the negative attitude to the atomic energetic and to some separate radiation and chemical dangerous industries was formed. The latter fact appeared when it was necessary to solve acute problems of the national economy in conditions of the economical and ecological crises.
- 145. The heaviest factors of the catastrophes` influence for the development of the productive forces were: migration of the population, putting productive capacities of the ChNPP out of action.

The following indicators changed in first turn due to the disaster:

- 146. the state of the population health; structure of the population employment, especially on the contaminated area; size and structure of the resettlement through the Ukrainian territory;
- farming and forestry connected with processing of agricultural and forestry production within the contaminated area;

- national economy providing with power and territorial arrangement of its production.
- 147. Both absolute and comparative shortages restricted to a great extent development of the productive forces and territorial arrangement in Ukraine before the catastrophe. The problem became more distressing after the catastrophe as the significant part of the water-supply and irrigation systems had appeared to be under influence of radiation.

Naturally, not each type of damage should have strictly fixed appraisals, including social and political, cultural and moral aspects of the ChNPP catastrophe consequences.

- 148. The negative influence for the productive forces of Ukraine and especially of the suffered regions, showed the weak development of social and cultural sphere, infrastructure and the staff of which were exposed to danger of radioactive and some other attendant factors. The presently existed system of social and cultural service of the residing population was formed mainly in the thirties. Exhausted funds of the health services organisations on culture, education, commercial, municipal and everyday services form the key part of the system.
- 149. The Chernobyl catastrophe being unprecedented in the character and scale, brought considerable damage for the Ukrainian Polissia traditional culture, one of the unique ethnocultural regions of the Slavonic world.

But, first of all, the unique feature of the Prypiat Polissia consists in its natural geographic conditions (scarcely accessible forests, marshes) in material and spiritual culture of this land (in national architecture, traditional way of life, folklore, dialects, national applied art) which preserved a lot of relict features ascending to the deep antiquity, that was proved to be true by scientific investigations of the last decades.

- 150. Besides, the folklore traditions in Polissia, in modern scientists opinion, being practically free from nonslavonic influence, can serve as a model for re-creation of the whole slavonic folklore fund. Just in the Polissia region the pre-Christian rituals exist even up today as "leading a bush", farewell of water-nymphs and the others, besides the archaic diphthongs sound in the dialect of Polishchuky.
- 151. The Chernobyl disaster became the reason for destruction of all the complex of material and spiritual culture for significant part of the Polissia ethnographical zone. The relations that had been built by ages (production, ecological, social, living and relative connections) are broken off. All the cultural microcosm is demolished of the one-time compact ethnographic group which is leading to assimilation in its new non-traditional circle.
- 152. Besides, the specific rituals, folklore, language are lost due to the forced mass moving and dispersal of the native Polissia inhabitants suffered due to the Chernobyl contamination.

At the same time the whole world of material ethnographic values was left in the deserted exclusion zone: the national art things, objects of local craft industry, domestic use, traditional living and farm buildings, neglected monuments of history, archaeology, architecture. The anthropogenic traces of the thousand-year history are disappearing gradually that has found reflection both in planning of villages and

separate farms and in arrangement of ancient cemeteries, roads, farms lands, social constructions.

153. In this way, a threat of forming the continuous dead zones has hanged over the unique Ukrainian history-ethnographic region, due to the Chernobyl catastrophe, were the thread is being broken for ethnocultural succession of generations.

Socio-Psychological description of Chernobyl catastrophe

A. Belarussian Analysis

- 154. The impact of the consequences of the catastrophe at the Chernobyl NPP on humans and the environment put the whole civilisation into exclusively complicated socio-ecological, political position related to the necessity of solution of the tasks both of local and planetary scale affecting different parts of social life, economy, culture, rights.
- 155. Disastrous consequences of the accident expressed in contamination of vast territories by radionuclides with different half-decay period, irradiation of millions of people, exclusion from economic turnover of the contaminated agricultural lands, mass relocation of people from the most dangerous residential areas, development of stress, increase of the quantity of somatic and oncological illnesses, all these influenced greatly the psychological status of the population.
- 156. In the result of the catastrophe a new socially political region was formed, that of the so-called "Chernobyl province", which is characterised by the increased content of radionuclides in the upper layer of geological environment, in flora and fauna. The Chernobyl catastrophe alongside with ecological outburst became the reason of both regional and global degradation of the living qualities of the biosphere and created threats to the loss of its stability and balance.
- 157. In the result of the catastrophe the life style, work conditions and welfare, the nature of psychological and moral condition of the residents of the affected regions have changed.

People behaviour has changed. There are significant changes in the diet of people. Stress condition and discomfort have appeared.

- 158. Description of the main categories and groups of the affected population The Supreme Soviet of the Republic of Belarus declared the whole territory of the republic to be the zone of ecological calamity. During the first stage after the accident 24.7 thousand people were evacuated. Nowadays, more than 130 thousand citizens have been resettled. The main criteria for evaluation of the territory, where residence and work activity do not require any limitations, is the effective dose equivalent not exceeding 1 mSv/y.
- 159. According to the Law "On Social Protection of Citizens Affected by the Chernobyl Nuclear Power Plant Catastrophe" the following categories of the affected population are defined:
- 160. Participants of the liquidation of the catastrophe at the Chernobyl NPP

Out of them additional benefits are granted to people, who became invalids due to the causes related to the catastrophe at the Chernobyl NPP (according to the Article No.18). By now there are 68,803 people, out of which 4,316 participated in liquidation of the consequences of the accident at the Chernobyl NPP in 1986-1987. To the separate group (915 people) belong children, who became invalids due to the thyroid cancer or other illnesses related to the Chernobyl catastrophe.

161. - There are 1,298,916 people, who live on the contaminated territories 135,000 people have been resettled.

In the whole there are 118554 liquidators (including 7521 invalids, 81,462 people – liquidators according to the Article No.19 and 29,571 liquidators according to the Article No. 20).

- 162. In the initial period after the accident, there was a substantial increase in γ -radiation exposure dose rate detected virtually all over Belarus' territory. The levels of short-lived iodine isotopes were so high that the exposure to them was named "iodine blow". This led to high thyroid exposure doses in people, which subsequently resulted in considerable increase in thyroid pathologies.
- 163. In April-May 1986 the highest levels of the iodine-131 contamination were registered in Bragin, Khojniki, Narovlya districts of Gomel region, where its content in soils made up to 37000 kBq/m² and more. The most contaminated in Belarus are the Gomel, Mogilev and Brest regions. The radioactive contamination has a patchy character and is not equally distributed.
- 164. Strontium-90 contamination of the republic over 5.5 kBq/m² were observed on the area of 21100 km² (that is 10% of Belarus' territory) reaching in some places the levels of 137-1800 kBq/m².
- 165. In the zone of radioactive contamination there are about 340 industrial enterprises. Radioactivity contaminated territories are now placed in the most difficult conditions. Crisis characteristics are the most vividly revealed at these territories decline in production, deflux of population from these regions, low level of the needs compliance in social welfare and medical service of the population.

Some limitations were introduced for economic activity and conditions of residence in the affected regions.

166. In people exposed to radiation there are changes observed in psychoemotional status; decrease of the adaptation level, brought about by uncertainty on oneself; unstable self-evaluation and pessimistic evaluation of the future. Specific peculiarities of these disorders are determined by the following reasons:

167.

- complex nature of the impact of different factors;
- inadequate knowledge of the radiation effects;
- permanent worries for the health and welfare of oneself and especially of one's relatives and children:
- sharp change in the life stereotype (imposed relocation, break of the usual lifestyle, change of the residential area and the work, etc.);

- narrowing of the possibilities of social-professional self-determination, especially in the youth;
- cognitive dissonance, related to different information both on the real radiation situation and its possible negative consequences.
- 168. For those people, who live on the contaminated by radionuclides territories, there is also another significant stress factor, that of the necessity of permanent following the measures of safety, permanent feeling of presence of the invisible radiation danger and necessity of frequent medical examination.
- 169. The mass socio-radioecological stress gave birth to several adaptation syndromes:
- increased somatisation of anxious expectations ("run away into illness");
- devaluation of needs (socially-psychological apathy);
- fixation on unpleasant traumatising living experience (its extreme case is that of the syndrome of despair).
- 170. During socio-psychological research it was found out that in 1987, 48% of the examined were exposed to the stress syndrome, in 1991 this figure was 54%, in 1995 74%. Increased somatisation was observed in practically 2/3 of the affected regions.
- 171. Fixation of socially-psychological conditions of an individual on unpleasant, traumatising experience is widely observed. Out of the examined population 62.2% of the people express the feeling of the loss of personal safety, unbelief in the future, which is an evidence of a deep psychological trauma and lead to pessimistic comprehension of the reality.

172. Residents of the contaminated territories

In 1998 there were 2,906 settlements in zone of radioactive contamination in the Republic of Belarus. In 1991 this figure was 3,370 settlements. Out of those 76 settlements are located in the zone of subsequent relocation (15-40 Ci/km²) and 1,088 in the zone with the right for relocation.

173. The total number of population residing at the contaminated territories is 1,621,015 people including 419,342 children in the age from 0 to 17 years old. In the most contaminated zone, the zone of subsequent relocation, there are 23,766 residents out of which 5,725 children younger that 17 years old.

174. The most affected are:

- Gomel region, which has on its contaminated territories 1,528 settlements, 1,250,164 people (320,763 children younger than 17 years old)
- Mogilev region, which has on its contaminated territories 866 settlements, 153,398 people (38,755 children younger than 17 years old)
- Brest region, which has on its contaminated territories 167 settlements, 167,299 people (48,256 children younger than 17 years old).
- 175. In the territory of the Republic of Belarus, contaminated by radionuclides there live 548,196 families out of which 276,946 families have children.

In the rural area in 2,869 settlements there live 537,887 people (221,136 families, including 5,819 families with children). Village children make up 123,690 people. In the whole on the contaminated territories there live 136,485 children under 6, 209,732 children aged 7-14, and 73,125 teenagers.

176. In rural area there live 40,546 children under 6, which creates additional problems of socio-psychological nature especially with respect to organisation of feeding of such category of children.

177. Relocated population

Families of the relocated population experience traumatising impact on their psychic, which is also backed up by contradicting information, ambiguity of life perspectives, which leads to appearance of symptoms of a victim psychology, uncertainty in personal capabilities, expectations of assistance from adults. Often this leads to the feeling of permissiveness, deviations in behaviour.

- 178. Children and teenagers are the most susceptible to the impact of negative factors. In examination of the families of the relocated population it was figured out that they expect and experience troubles oftener, are oriented onto support of the family rather than friends, as well as preference to active influence onto problematic situation.
- 179. Solution: to get rid of the feeling of hopelessness by means of analysis of the traumatising situation, search of means to overcome the difficulties, which makes it easy to shift to active reactions.

B. Russian Analysis

- 180. To the citizens who have undergone of radiation owing to Chernobyl catastrophe, to which the operation of the Russian Federal Law is distributed, concern:
- 1) <u>The citizens</u> received or who have transferred radial illness and other diseases; connected with radiating effect owing to Chernobyl catastrophe or with work on liquidation of consequences of catastrophe on Chernobyl NPP;
- 2) The invalids owing Chernobyl catastrophe from number:
- 181. Citizens (including temporarily directed or sent on business), taking part in liquidation, of catastrophe within the limits of a zone of alienation either occupied on operation or other work on Chernobyl NPP;
- 182. Military men and militarians called on the special taxes and involved in fulfilment of work, connected to liquidation Chernobyl catastrophe, irrespective of a place of a dislocation and executing work, and also command and ordinary people of law-enforcement bodies taking place a service in a zone of alienation;
- 183. Citizens evacuated from a zone of alienation and moved from a zone of relocation or who have gone away in voluntary order from indicated zones after decision making about evacuation;

- 184. Citizens who gave marrow for saving life of the people suffering owing to Chernobyl catastrophe, irrespective of time, past from the moment of transplantation of marrow, and time of development at them in this connection physical inabilities;
- 185. 3) The citizens (including temporarily directed or sent on business), accepting in 1986-1987 years participation in work of liquidation of consequences of Chernobyl catastrophe within the limits of a zone of alienation or occupied in this period of work connected to evacuation of the population, material assets, agricultural animals and on operation or other work on Chernobyl NPP;
- 186. The military men and militarians called on the special taxes and involved in this period for fulfilment of work connected to liquidation of Chernobyl catastrophe within the limits of a zone of alienation, including flyers of civil aircrafts, irrespective of a place of dislocation and executed work; command and ordinary people of law-enforcement bodies taking place in 1986-1987 years to a service in a zone of alienation;
- 187. The citizens, including military men and militarians called on the military taxes and who were taking part in 1988-1990 years in work on object "SHELTER", junior and average medical staff, doctors and other workers of medical establishments (except of people whose professional activity is connected to work with any kind of sources of radiations in case of radiation situation on their job), people received above permitted standard dozes of an exposure for want of rendering of medical aid and service in period from April 26 till June 30, 1986 of people suffering in an outcome of Chernobyl catastrophes and being a source of radiation;
- 188. 4) <u>The citizens</u> (including temporarily directed or sent on business), accepting in 1988-1990 years participation in work on liquidation of consequences of Chernobyl catastrophe within the limits of a zone of alienation or occupied in this period on operation or other work on Chernobyl NPP;
- 189. The military men and militarians called on the special taxes and involved per these years in fulfilment of work, connected to liquidation of Chernobyl catastrophe, irrespective of a place of a dislocation and executed work, and also command and ordinary people of law-enforcement bodies taking place in 1988-1990 years a service in a zone of alienation;
- 190. 5) The citizens occupied on work in a zone of alienation;
- 6) <u>The citizens evacuated</u> (including gone away voluntary) in a 1986 from a zone of alienations or moved including gone away voluntary from a zone of relocation in a 1986 and per consequent years, including, including children, and children, which at the moment of evacuation were (are) in a womb;
- 7) The citizens constantly living zones, (working) for territory, of residing with the right on relocation :

- 191. 8) <u>The citizens constantly living zones</u>, (working) for territory, of residing with the preferential socio-economic status;
- 9) The citizens constantly living (working) in a zone of relocation before their resettlement in other areas;
- 192. 10) The citizens occupied on work in a zone of relocation (not living in this zone);
- 11) The citizens who have gone away voluntary on a new residence from a zone of residing with the right on relocation in a 1986 and per consequent years;
- 12) The military men, command and ordinary people of law-enforcement bodies taking place a military service in a zone of alienation, zone of relocation, zone of residing with the right on relocation and zone of residing with the preferential socioeconomic status.

C. Ukrainian Analysis

193. Description of main population categories and groups suffering from Chernobyl catastrophe

People suffering from catastrophe take it as a personal tragedy: crash of the world, life style they used to, plans and nothing to do with what has happened. After the catastrophe, there was a negative tendency of loss of control over life. Those living on contaminated territories and resettlers faced increased demands for psychological resistance to stress.

- 194. Mobilisation of human being recourses under unsafe and unaccustomed conditions influenced his functional and mental health. Social and psychological researches delivered on contaminated territories after the catastrophe revealed strong striving to leave dangerous situation. Withdrawing from potentially negative consequences on contaminated territories, from taking responsibility was a typical example of social conformism.
- 195. Population demonstrated low level of activity, initiative, readiness to changes. Same concerned professional relations. There was no desire to develop professional skills, cope with problems. State of health worsened. These factors made it possible to forecast increase of neurotic and psychosomatic disorders among inhabitants of contaminated zones. Such disorders are characterised by dissatisfaction with authorities and total personal passiveness.
- 196. Analysing the data, we can conclude that all post-Chernobyl factors (ecological, mental, social, etc.) have negative impact on a person. We also should mention mass media influence on coping with consequences of catastrophe, for mass media are the strongest and often the only one source of information. "Press freedom" and non-willingness of some mass media leaders to analyse critically the information resulted in myths, which worsened the situation.
- 197. Under conditions when majority of population do not trust official information, myths add to social and psychological tension in the regions suffered from

catastrophe. Distrust to information causes inadequately high estimations of contamination and irradiation dozes received by population living on contaminated territories.

- 198. Time passed after the catastrophe changed psychological perception of consequences by population suffering from catastrophe. According to sociological data, number of people regarding their problems as Chernobyl related has increased. Psychological crises of "Chernobyl victims" aggravated. Currently these are mostly the resettlers who cannot adapt to new conditions and not those living on contaminated territories, consider themselves as "Chernobyl victims".
- 199. Negative impact of catastrophe remains of the greatest importance for the people with "victim syndrome", though enough time passed after the disaster. They are still anxious about their lives. Chernobyl is not their past, but their present. These people are afraid of Sarcophagus and Chernobyl plant and are ready to believe in any myth. They are characterised by feeling of passive doom.
- 200. "Chernobyl victims" do not see any perspective. These people do not plan their life at all. Thus, we can conclude that they not only resist the pressure of external unfavourable conditions, but also do not believe in better future and feel themselves non-capable to any activity. There is a tendency among them to get rid of any personal responsibility.
- 201. Non-willingness to do anything, unbelief in ones own powers adds the above picture. Loss of inner psychological resources for resistance, perceptions of the situation as the one that cannot be changed characterise not only the personal feelings. We can speak about integral evaluation stereotype whose life is pessimistic as a whole. "Victims" differ from the rest of population. They blame society and government and are awaiting for all possible assistance.

Population of contaminated territories

- 202. Social and psychological consequences are different in different contaminated zones. They do not depend on irradiation dose. During the years passed after catastrophe human consciousness has developed and accumulated a number of stereotypes about the people suffering from the disaster.
- 203. Self-perception of pain differs from perception of them by those who did not suffer from catastrophe. The later do not identify "victim pattern", adaptation to difficult conditions is on the 1st place. Those suffering from catastrophe, on the contrary, focus not on adaptation but on resistance to catastrophe's consequences.
- 204. Special attention should be paid to negative psychological dominant, i.e. fifth inhabitant of zone believe that nobody cares about them. However, we should underline that problems of people suffering from catastrophe did not caused egoistic attitude towards the rest of population that testifies to healthy moral perception of the disaster and objective evaluation of the situation.
- 205. Because of continuous resettlement going on in the 2nd zone of obligatory resettlement, number of population there and their age structure has changed a lot in

comparison with the rest of Ukraine. Mortality there is much higher than birth rate. In contaminated zones average family extent is 6.1% and in 2nd zone 3 times less than in the country as a whole.

- 206. As a rule, inhabitants of 2nd zone either do not have children or are old. They do not want to leave and stand for their right to live in on a homeland. Psychological tension there can result from conflict with authorities because of refuse to resettle. Besides, these regions are economically non-perspective and the government does not finance their development.
- 207. Forced resettlement lead to re-emigration because people did not managed to adapt to new conditions. Currently, inhabitants of the 2nd zone is ready to take responsibility for themselves but they demand to reconsider zone's status. They demand to turn 2nd zone into 3rd one and cancel the status of economically non-perspective.
- 208. In the 3rd zone of guaranteed (volunteered) resettlement seeds of the problems are sowed by economical situation in the country. Part of population is dissatisfied with low tempos of resettlement. Situation is the worst in the 4th zone of strict radio-ecological control. Anxiety level of population is the highest one there.
- 209. From the very beginning there was no state program of resettlement for this zone. Inhabitants of it could leave but without any governmental support. Lately radiological situation in the zone has improved and it does need protection by Chernobyl Law any longer. Thus, population of it want have benefits and privileges.
- 210. However, because of complicated economical situation in the country, "Chernobyl money" is often the only source of family budget. Especially it concerns families with children. The fact that Verhovna Rada (Parliament) of Ukraine is constantly reconsidering "About the Status and Social Protection of People Suffered from Consequences of Chernobyl Catastrophe" Law, adds to socio-psychological tension in the zone.

Evacuees and resettled

211. Evacuees

In 1986, immediately after the catastrophe more than 45,000 people were evacuated from the Exclusion Zone. They faced the situation when they knew nothing about their future, personal and professional perspectives, and their health. The very evacuation was of psycho-traumatic character. Loss of property, situation of real danger, which you can neither see nor feel and which nobody ever experienced, obscure future affected reaction of evacuees.

212. During the very first month after the catastrophe, they were under depression and apathy. After compensation for the property, solving housing and employment problems their state has a little bit stabilised. In 1991, a law for social benefits and privileges of the evacuees was adopted. They received 1st and 2nd status of victims from catastrophe.

- 213. Privileges related to all kinds of vital activities. Evacuees are treated in specialised clinics, receive free medicines and any complicated and expensive treatment, for practically all their diseases are considered as Chernobyl related. Besides, they receive monthly donations for foods, annual free treatment in sanatoriums, do not pay for local transport, have benefits for housing and public utilities, etc.
- 214. Thus, this category appeared to be the most socially protected one. Even now, when country is experiencing crises, Chernobyl donations are of the most priority. As a rule, evacuees are living close from each other because they received flats simultaneously. They have public organisations and know how to stand for their rights. "Chernobyl victim" syndrome is the position, which help them to survive under economical crises.

215. Resettlers

Resettlers are a numerous population group with its specific peculiarities. Intensive migration processes such as evacuation, settling out, individual resettlements to «clean» areas were going on territories which had suffered from catastrophe. Main motivation for resettlement was high radiation dangerous for health and lookout for children's future.

- 216. These factors added to high level of socio-psychological tension on the territories of resettlement. Old people and unwillingness to change the usual life style impeded the process. The very resettlement, especially for rural population with stable conservative behavioural models was a stress by itself. Organisation of the process was of great importance.
- 217. During all post-catastrophe period under conditions of unstable social and political situation the criteria for resettlement and concept of living on contaminated territories changed several times. Population learned that they were living in contaminated zones for years with the health risk. Some people were resettled from contaminated area to less contaminated ones, the very routine was changing, programs were not fulfilled. Al these badly influenced on social and psychological tension.
- 219. Researches revealed close correlation link between the level of personal anxiety and wish to change place of residence. After analysing the situation on new places, it was concluded that level of anxiety there do not differ a lot from the one on contaminated territories.
- 220. The very process of resettlement caused by the consequences of ecological disaster transform or even break all life-support system both of individual and population group as a whole. Evaluation of resettlement differs among the resettlers. Majority believes that it is necessary only in case of very high radiation. Even after resettlement it is remains the problem for 60% of resettlers.
- 221. Uncertain future, loss of property, break of relation links, health risk result in socio-psychological tension. Only 5% of been resettled believe that new local authorities will take care of them.

For the moment, 61,5 thousands have been resettled from the zones of obligatory and guaranteed resettlement. 11,000 are still living there. The process was delivered in different ways.

- 222. Some villages were resettled to new places built for them. As a rule, neighbours were settled close to each other, like in the places they lived before. People maintained relative and neighbour relations, community holidays and traditions. However, they faced employment problems, for there were no working places.
- 223. Infrastructure in new settlements was far behind the construction process. Unemployment is still a serious problem there, especially among young people. Often family budget consists only of Chernobyl donations. Unfortunately, level of alcoholism desperately increased in new settlements.
- 224. Some villages received houses on new streets of old settlements. Then, they faced problems with local population because of employment competition. Law of Ukraine guaranties them privileges for employment. Malevolence of local inhabitants, new cultural traditions and ethnic environment were especially badly experienced by old people.
- 225. We should mention that resettlements are independent ethnic and cultural community. They used to live in the forest environment and were resettled to forest-steppe and steppe regions with different way of life. They desperately miss their homelands. New behavioural stereotypes are developing very slowly. Only 8% consider that those who resettled are happier than the ones who are still living in old places.
- 226. Part of population left for large cities to their relatives or for far regions by families. Their problems are mostly the same as the ones of the second group, but having appeared under difficult conditions, they did not have support of other resettlers.
- 227. Besides, social health depends a lot on time of resettlement. Those who changed places of resident before 1992 have mostly adapted. They have received good financial support and compensation for the property they've lost. Most of them were placed at job. Resettlers of 1992 1993 found themselves in a most difficult situation. Their financial compensation depreciated and social and economic crises impeded employment. These people appeared in a new place without funds, work and very often without relatives', friends' and neighbours' support.
- 228. According to sociological data, 80% of "Chernobyl victims" are not those who are living in contaminated areas, but resettlement. Thus, stress and non-adaptation influence the development of the syndrome.

After 1993 re-immigration started. People preferred to return to old familiar places, often losing privileges and benefits. Currently we are observing two counter processes. Some families are voluntarily leaving contaminated territories and those resettled before are returning.

Liquidators

- 229. Large group of population suffering from the disaster is liquidators, i.e. immediate participants of liquidation of the Chernobyl catastrophe consequences. By 1st January 1999, their number was 343,084. It is 15,550 less than a year ago. The fact can be explained not only by natural demographic processes but also by reregistration of liquidators delivered in 1997 1998, during which not all the liquidators confirmed their status. 13% of liquidators took part in liquidation activities by their own will, 35% were militaries mobilised by military commissariats, the rest were sent by authorities.
- 230. Liquidators are living in all oblasts of Ukraine, but the majority of them are living in Kiev and Kiev Oblast, Donetsk, Dnepropetrovsk, Kharkov, Poltava, Chernigiv and Zhytomyr Oblast. 85% of liquidators are men, and 15% women. 30% have high or uncompleted higher education, which is 10% more than in Ukraine as a whole. About 40% are workers, more than 40% are engineers and white-collar workers. 14% of liquidators have 1st category, 68% 2nd category and 18% 3rd category status. State privileges and benefits depend on the category.
- 231. Unfortunately, according to "About the Status and Social Protection of People Suffering from Chernobyl Catastrophe" Law of Ukraine, status of liquidator depends not on his/her merits and deeds, but on what he/she lost because of the catastrophe. Such a situation adds to psychological and moral trauma. It is proved by sociological Investigation. Results of sociological investigation delivered by National University in 1995 could be a good example:

Financial - 6.3%
Health - 30.8%
Nervous - 25.9%
Moral - 45.9%

- 232. All these factors have bad influence on liquidators. Nerve diseases, as well as cardiac ones, are on the 2nd place among those, the liquidators consider as Chernobyl related ones (about 55%). Because of health problems liquidators prefer to work in governmental institutions, for there is less tension there and easier to receive state benefits and donations.
- 233. However, it leads to financial problems because governmental salaries are less that the ones in private business. Besides, because of inflation and other aspects of economical crises, donations decreased. According to prognosis, there is a strong tendency to poverty among liquidators.
- 234. Because of concentration of people on personal problems and decrease of interest in Chernobyl issues, social situation of liquidators worsened. Today, when the growth of poverty among liquidators is higher than the one of the rest of population, liquidators consider that they need following kinds of governmental support:

Financial - 91.3%Medical - 79.9%Psychological - 19.6%

235. Those who need psychological support arouse special anxiety. They more often note negative attitude towards them and often speak and think about empty villages, chaos, panic and fears. According to self-evaluation, every fifth citizen of Ukraine suffers from nervous diseases, while it is every second among liquidators. It is obvious that a crisis in Ukraine adds to situation. Political fights, social problems, hyperinflation, growth of prices, non-stability of a person in a society badly influence on mental health and cause nervous diseases.

PART 2- Countries and UNESCO Institutional actions directed on catastrophe consequences mitigation

Belarus: Activity of ministries and institutions directed on liquidation of catastrophes consequences

- 236. During the last years natural calamities, which took place in different countries of the world collected their dreadful yield thus becoming the cause of death for at least 3 million people. The whole number of victims of disasters, including those disabled, injured, psychologically traumatised, those left homeless or simply ruined and broken, is calculated in hundreds thousands. Economic losses from the largest disasters of the last decade exceed 400 billion US dollars.
- 237. Developing countries are the most affected ones. According to the conclusions of the international experts 90% of natural catastrophes happen just in such countries. Moreover, the most bitter thing is that as the experience of industrially developed countries shows, timely preventive measures could significantly help in reducing such losses.
- 238. The units of rescue services are the first who fight the natural calamities. In different countries they are called in a different way: the rescue service 911 in the United States, the Ministry of Emergencies in Russia, Belarus, Ukraine, etc.
- 239. Belarus is characterised by the State Emergency Prevention and Response System, which was established in 1993 according to the Decree of the Belarus Council of Ministers "On Republican Emergency Prevention and Response System". The same document defines also the "chief actors", the list of whom includes medical personnel, the units and forces of the Civil Defence and the Ministry of Emergencies. The whole system is operated by the Governmental Commission.
- 240. The Republic of Belarus is a young independent republic. Obviously many structures undergo changes together with the country itself. Thus the normative-legislative base in the field of prevention and response in emergencies is being established and constantly improved.
- 241. In March 1998 the Law of the Republic of Belarus "On Protection of Population and Territories from Emergencies of Natural and Man-made Character" enters into force. The Law defines organisational and legislative norms in the field of protection of Belarus citizens, foreigners and persons without citizenship located on the territory of the republic; all ground, air and waters of the republic; industrial and social facility as well as the environment from emergencies of natural and man-made origin.

The Article 5 of the mentioned Law envisages classification of emergency situations onto local, district, regional, republican and transboundary.

242. Local emergency situation is defined as an emergency when there are not more than 10 people affected, material loss does not exceed one thousand minimal wages calculated by the day of emergence of such a situation, the emergency zone does not extent beyond the borders of the territory of an industrial or social facility.

- 243. District emergency situation is defined as an emergency when there are more than 10 but less than 50 people affected or the conditions of human activity of more than 100 but less than 300 people are disrupted or the material loss exceed one thousand and is less then five thousand minimal wages calculated by the day of emergence of such a situation, the emergency zone does not extent beyond the borders of a settlement, city, district.
- 244. Regional emergency situation is defined as an emergency when there are more than 50 but less than 500 people affected or the conditions of human activity of more than 300 but less than 500 people are disrupted or the material loss exceed five thousand and is less then 0.5 million minimal wages calculated by the day of emergence of such a situation, the emergency zone does not extent beyond the borders of the region.
- 245. Republican (national) emergency situation is defined as an emergency when there are more than 500 people affected or the conditions of human activity of more than 500 people are disrupted or the material loss exceed 0.5 million minimal wages calculated by the day of emergence of such a situation, the emergency zone extent beyond the borders of two regions.
- 246. Liquidation of emergency situations is carried out by means and forces of facilities, local executive and regulative authorities, republican bodies of state management under leadership of respective emergency commissions involved.

Liquidation of a local emergency is implemented by means and forces of a certain facility involved.

Liquidation of a district or regional emergency is carried out by means and forces of local executive and regulative authorities involved.

Liquidation of a republican (national) emergency is executed by means and forces of respective republican bodies of state management.

- 247. Should there be a necessity and according to a due procedure the Council of Ministers of the Republic of Belarus can apply for deployment of means and forces of the Commonwealth of Independent States for liquidation of the consequences of emergencies of natural and man-made character.
- 248. Should there be a necessity and according to the legislation of the Republic of Belarus, means and forces of the Ministry of Defence, units of the Civil Defence, other military units can be deployed for liquidation of emergency situations.
- 249. Public associations in compliance with the legislation of the Republic of Belarus and the Statute on such associations can participate in actions on protection of the population and territories from emergencies. Should this be the case they act under the supervision and management of certain republican bodies of the State Emergency Prevention and Response System.
- 250. The latter are being charged with the task on transportation of the members

of public associations to the emergency situation zone and backwards, organisation of their housing, provision of food, salaries, material-technical, medical and other types of assistance in their activity in such conditions.

251. Members of liquidation of an emergency out of public associations must undergo special training. Such training can be obtained from the department on civil defence, which organises special courses on this matter.

Obviously, the republic continues to upgrade its normative-legislative base in the field of emergency prevention and response basing on the experience of other countries.

- 252. Significant role in emergency prevention is attributed to information. The task of emergency prevention includes timely informing of the population, their sheltering or evacuation from dangerous regions, provision of normal conditions for residence in shelters or in place of their evacuation and afterwards return of the victims to their previous place of residence.
- 253. Experience shows that early warning on a forthcoming catastrophe is nothing without early warning on potential risk. A human being who does not understands a threat does not try to protect oneself. That is why far before a disaster people must be informed in details on the nature and scales of a threatening catastrophe, on possible consequences for the whole community and a single family.
- 254. The Article 8 of the above mentioned Law defines that the republican body of state management in the field of emergency situation is obliged to inform the population through mass media or through other channels timely and in details on the status of protection of the population and territories from emergencies, on methods and means of population protection from such emergencies.
- 255. Depending on the scale of localisation of an emergency situation in its critical phase, the decision on its liquidation is taken by respective authorities both at the local and national levels.

All practical actions on liquidation of the consequences of a disaster are implemented in compliance with available normative documents, enactments and decrees of the President, Council of Ministers, instructions and orders of local authorities, heads of facilities by the time of occurrence of an emergency situation.

Russia: Activity of ministries and institutions directed on liquidation of catastrophes consequences

- 256. In 1986-1988 measures for the radiation protection of the population were taken as soon as contaminated sites were revealed. They included various restrictions, clean-up operations, resettlement of residents. When more accurate information on the radiation situation was obtained, the zone of control was extended and the scale of countermeasures was increased.
- 257. At the initial stage, the major activities were carried out in so-called "zone of stringent control" limited by an isoline of 555 kBq.m-2 (about 100,000 inhabitants). It was believed that, with such a zone boundary, the dose limit of 100 mSv would not

be exceeded during the first year. Later the following restrictions upon admissible doses of exposure to population were accepted: 30 mSv for the second year and 25 mSv for the third one. They provided a significant reduction in doses of exposure to population but disturbed the habitual way of life.

- 258. In 1988-1990, some changes in the society and understanding of the negative effect of numerous restrictions upon vital activities of residents of contaminated areas induced an attempt of passing to the period of rehabilitation on the basis of total lifetime extra dose limit equal to 350 mSv.
- 259. This concept gave rise to a sharp discussion in such a dynamically changing society as the Soviet Union of that period. So the USSR Government was forced to appeal to the IAEA to organise an independent examination. The results of the International Chernobyl Project that confirmed the sufficiency towards the aggravation of the situation. Responsible organisations (NCRP, USSR, WHO, the IAEA, and others) focused on radiological problems and could not properly assess social, psychological and political factors.
- 260. At the beginning of 1991, a new concept of living in contaminated territories was accepted that established the new intervention level, namely, extra exposure dose above 1 mSv/year. It was used in the Law of the Russian Federation "On the Social Protection of the Population Affected by Radiation Resulted from the Accident at the Chernobyl NPP" adopted in 1991.
- 261. The law which is still in force (though it has been slightly modified) defines the privileges and compensations on the basis of the concept of zoning territories in accordance with the contamination level. Under intense political pressure, the zoning concept was supplemented, along with the dose criterion, with an extra one, namely, the density of soil contamination with Cs-137. An isoline of 37 kBq.m-2 was taken as the lower limit defining the boundaries of contaminated zones.
- 262. So, the measures implemented during the first years after the accident were primarily protective in nature and oriented mostly to prevention of extra exposure of the population. The experience of those years demonstrated that efficient measures for alleviation of Chernobyl catastrophe effects could be realised with the proviso that the complete set of the problems of contaminated regions, including investment, ecological, economic, and other problems would be considered at the state level.
- 263. The first attempt of that kind made 1988 was a program of work in the Bryansk Region. In 1990, the State Program, incorporating some urgent measures for the years 1990-1992, the work has been performed pursuant to "The Unified State Program on Protection of the Population of the Russian Federation against Consequences of the Chernobyl Catastrophe for Years 1992-1995 and for the Period up to the Year 2000".
- 264. Additionally, a number of special programs (e.g., "Children of Chernobyl" and "Dwelling for Liquidators") are being realised. Within a number of tasks on population protection and rehabilitation of territories, the program is being realised differently in various contaminated zones.

- 265. The State Program is aimed at reduction of negative medical, social, and psychological effects down to minimum possible level on the basis of general rise in life standards, leading development of the network of public health institutions, improvement of the ecological situation in general, and compensation of economic damage.
- 266. Co-ordination of work overcoming the Chernobyl accident consequences is currently entrusted to the Ministry of Russian Federation for Civil Defence, Emergencies, and Elimination of Consequences of Natural Disasters.
- 267. The following institutions are also involved: the Ministry of Health, the Ministry of Agriculture, the State Committee on Sanitary and Epidemiological Surveillance, the Federal Service on Forest Economy, the Russian Federal Service for Hydrometeorology and Environmental Monitoring, the Ministry of Education and other departments. A certain part of the work is performed directly by local authorities at the expense of the State Program resources.
- 268. From the very first days of the Chernobyl accident, the following efforts to reduce population exposure doses were made: resettlement, decontamination and burial of radioactive waste, restriction of access and cessation of economic activity, resulting from medical treatment of resident were taken. The implemented protective measures provided considerable reduction of exposure dose.
- 269. At the initial stage, primarily research medical programs or mass screening (condition of thyroids in children, etc.) were applied to the population in most contaminated territories. With time, even increasing attention was paid to development of local medical facilities and rendering specialised medical aid.
- 270. During the years following the accident, regional and local medical institutions were equipped with diagnostic apparatus and medicinal preparations or the budget resources for such purchases were provided. Some measures were taken to attract necessary medical personnel. During the period of 1992-1995, a number of hospitals (750 beds in total) and clinics (up to 4,585 visits per shifts in total) were built and put into operation.
- 271. Much attention has been paid to protection of the health of those people who took part in emergency actions and clean-up operations (liquidators). The All-Russian Centre of Ecological Medicine has been created in St. Petersburg. It became the leading organisation rendering high-quality medical aid to more than 1,500 patients per year.
- 272. In 1992-1995, over 8 thousand people were examined and treated at the Centre. Ten interdepartmental experts committees have been created that deal with issues of cause of illnesses, disability, and mortality of people exposed. Four centres for social and psychological rehabilitation were created in the Bryansk, Orel, and Tula Regions to render legal, social, and psychological aid to all age groups of suffering people.
- 273. To provide registration of people exposed in result of the Chernobyl accident, the Russian National Medical Dosimetric Register (RNMDR) was created. The

number of people registered in RNMDR is 435 thousands, including 152 thousand liquidators. The fact of being included in the Register implies regular clinical examination. There are three levels of observation in RNMDR: the State level, Regional level, and District level.

274. In recent years, 25 leading specialised scientific research institutes pertaining to the RF Ministry of Health and Medical Industry and the Russian Academy of Medical Sciences have been involved in the medical observations. For contaminated regions, special food programs are being conducted that envisage

production of food with curative and radioprotective properties.

efficiency because of untimely accomplishment.

- 275. Resettlement: at the initial stage, decisions on countermeasures were made primarily on the basis of precluding acute radiation impact on the population and doses in excess over the limits in force. In conformity with the mentioned criteria, mass evacuation in the Russian territory was performed, though 4 inhabited localities (186 inhabitants) were resettled in the autumn of 1986. The measures for preclusion of thyroid overexposure (including iodine prophylactics) turned out to be of low
- 276. Large-scale resettlement of the population from the Bryansk Region of the Russian Federation started in 1989 in view of the predicted exceeding of the total lifetime dose and later this measure was applied to inhabitants of the resettlement zone. For a certain part of this zone, the notion of obligatory resettlement was introduced.
- 277. Additionally, the right of voluntary departure was granted to inhabitants of the so-called "residence zone with right to leave" (contamination with Cs-137 above 185 kBq.m-2). As a result of these measures, nearly 50,000 people were resettled or voluntarily left contaminated territories in Russia. Some part of the population refused to leave their homes.
- 278. The decisions on resettlement were made under intense pressure of public opinion and legislative bodies. From today's viewpoint one can affirm that under conditions when resettlement could not be avoided because of social and psychological reasons, it would be worthwhile just to provide people with opportunities to leave contaminated territories.
- 279. Decontamination of territories, buildings, and structures and burial of waste: the work started at the end of May, 1986. It involved subdivisions of chemical troops of Ministry of Defence of the USSR and those of civil defence. The work on decontamination was accomplished mainly within the "zone of stringent control" (contamination with Cs-137 was above 555 kBq.m-2).
- 280. In total, 472 inhabited localities in western districts of the Bryansk Region have been decontaminated since the accident. At 50 localities, decontamination was performed twice and at 6, thrice. Dozens of thousand cubic meters of ground and other waste have been buried. As a rule, the burial was effected in special trenches with clay "cut-offs" and a clay bed beyond natural low places. Places with low level of ground waters were chosen for such burials.

- 281. In 1986-1987, decontamination enabled improvement of the radiation situation by multiple dose rate reduction in some frequently visited areas in contaminated inhabited localities. By 1989, complete decontamination had practically exhausted itself as a protective measure.
- 282. During 1990-1995 the character of work changed. Clean-up operations were carried out in local areas in settlements, farms, production sites. These operations were accompanied by construction of new temporary storage facilities and reequipment of those constructed earlier, burial of objects of small economic value with high levels of radioactive contamination (or fire-hazardous, or presenting other kinds of danger).
- 283. Protective measures in agriculture and forest economy:

Practically all known protective measures were used in the post-accident period. In contaminated territories, some measures were aimed at partial substitution of agricultural product and types of animal husbandry were taken. Areas under a number of products were reduced, forestry was restricted, and sheep breeding was curtailed.

- 284. In 1986-1994, in the four most contaminated regions in Russia (Bryansk, Kaluga, Orel and Tula Regions) the liming of acid soils was performed over an area of 1,334.8 thousand ha, elevated doses of fertilisers were deposited over 1,526.5 thousand ha, significant improvement of meadows and pastures covered 130.9 thousand ha. The maximum volume of work was accomplished in the Bryansk Region.
- 285. Practically everywhere, nourishment rations for domestic animals were determined on the basis of actual contamination of forage component. Since 1994, ferrocene-contaning compounds allowing to reduce milk contamination by a factor of 2-4 have been widely adopted in the Bryansk Region as well as the final fattening of cattle with "clean" forage and monitoring of vital body content of Cs-137.
- 286. These measures allowed avoiding contamination of plant-growing production above existing norms everywhere, except in the most contaminated areas in the Bryansk and Kaluga Regions. During a few past years, production of goods with elevated Cs-137 content has been practically terminated. In the south-west districts of the Bryansk Region, the excess over the existing norms in main kinds of the farming production has been reduced many times.
- 287. Measures were developed and implemented to provide safety activities in agriculture and forestry, including means for personal protection and dosimetric control.

To restrict penetration of radionuclides into organisms of inhabitants, temporary permissible levels (TPLs) of content of radioactive substances in foodstuffs were introduced.

288. The practical implementation of such restrictions is related to the system of obligatory control effected by producers and sanitary services. Annual size of such control sampling amounts only in the Bryansk Region to 100,000 measurements. Any inhabitant can obtain information about the radionuclide content in foodstuff. If

production does not correspond to the Temporal Permissible Level, it is reprocessed or recycled. Besides there are numerous restrictions on gathering mushrooms, berries, medicinal herbs, on hay procurement in forests, etc.

- 289. The efficiency of the set of restrictions turned out to be sufficiently high. In 1986, the average dose of internal exposure within the "zone of stringent control" (above 555 kBq.m-2) did not exceed 15 mSv, in 1989 some doses of internal exposure to 95% of inhabitants of this zone were under 2.5 mSv and those in 1994, under 1 mSv.
- 290. For inhabitants involved in agriculture, recommendations on management of personal plots, procedures for reprocessing of production, mushrooms and berries, maintenance of domestic animals, hygienic measures were offered. In most contaminated regions, lime and potassium fertilisers were applied at personal plots. Local authorities were repeatedly recommended allocating cultivated pastures for pasturing private cattle.
- 291. However, for a number of reasons, some of those recommendations were not implemented. As a result, milk, one of the principal ration components, was often contaminated above the existing norms. At present, ferrocene-containing compounds for cows are extensively applied as they are free of charge.
- 292. Measures on improvement of inhabited localities implemented in contaminated territories also add up to dose reduction. These were gasification, construction and improvement of roads, construction of projects of housing and communal services, improvement of streets and recreation zones, construction and repair of water supply and sewer systems.
- 293. Some other implemented measures have resulted, directly or indirectly, in reduction of exposure doses or considered as protective ones by the public. Sanitation of children (e.g., organised trips to sanatorium and recreation camps) started in 1986, soon after the accident. People were paid numerous compensations and granted privileges.
- 294. Since 1991, particular attention has been paid to social protection of people exposed and to economic rehabilitation of territories affected by the accident. "Liquidators" and the population of affected territories have been granted (though with zone differentiation) a wide set of privileges and compensations (free medicines, free medical aid, earlier retirement, annual paid extra holiday, tax privileges, etc.). Additionally, a large volume of work on housing construction (over 2 million square meters). Projects in public health care, and social and industrial activities have been carried in contaminated territories.
- 295. In the period of 1992-1995, in contaminated regions houses of a total floor space of 1,200 thousand m2, general education schools for 15.5 thousand pupils, pre-school institutions for 3,000 children, club houses and recreation centres (3,500 places), gas pipelines (over 1,500 km), roads (over 500 km), were constructed. Some economic privileges, including tax ones, have been provided the possibility of obtaining credits on easy terms.

- 296. Since 1986, hundreds of scientific institutions have been involved in research to overcome consequences of the Chernobyl accident. The scientific work was carried out and co-ordinated by the following scientific centres: Taifun PA, Institute of Applied Geophysics, and Institute of Global Climate and Ecology (environmental monitoring); Scientific Research Institute of Radiation Hygiene (St. Petersburg) and State Research Centre "Institute of Biophysics" (assessment of radiation-hygienic situation and exposure doses for population);
- 297. Medical Radiological Scientific Centre of Russian Academy of Medical Sciences (health inspection of hundreds of thousand people included in the Register), All-Russian Scientific Research Institute of Agricultural Radiology and Agroecology (development of the scientific basis for agricultural and industrial production at the contaminated territories); Institute of Evolution Ecology and Morphology of Animals (radioecology problems); Russian Scientific Centre "Kurchatov Institute" (physic, chemical, and technical consequences of the Accident and development of new monitoring facilities);
- 298. Nuclear Safety Institute of Russian Academy of Sciences (problems of information and analytic support of the works); Institute of Economic of Russian Academy of Sciences and All-Russian Scientific Institute of Civil Defence and Emergencies (problems of economic rehabilitation).
- 299. The solution of the scientific problems has resulted in development of numerous recommendations, technologies, devices, and facilities that have been used in the work on overcoming of accident consequences. A considerable part of the research efforts are to be continued.
- 300. In the first years, overcoming of the Chernobyl catastrophe consequences was carried out by the Soviet Union quite independently, practically without participation of other countries. Exclusions were provided by the help in treatment of acute radiation sickness and some humanitarian programs.
- 301. After establishment of the International Chernobyl Project, conducted under the aegis of IAEA, in which about 200 independent scientists from 23 countries and international organisations took part (1990) and the special resolution of the United Nations General Assembly on the Chernobyl problem (45/190 of December 21, 1990), international contacts on Chernobyl affairs were given real impetus.
- 302. Co-operation between CEC and CIS countries was of significant interest and efficiency. In the framework of this co-operation, 16 scientific research projects involve about 200 laboratories and institutes results in a radical change of the research level in such fields as behaviour of radioactive substances in the environment, risk analysis and its control, exposure doses and their impacts. The public favoured the practical Russian-German measurement program. A lot of useful results have been obtained in joint projects with the USA and France.
- 303. The World Health Organisation (IPHECA), UNESCO, and other international organisation considerably contributed to the elimination of the consequences of the accident. Work was started on application of the Chernobyl experience to get ready to the situations of emergency at nuclear power sites.

In 1995 a major international training called "Polyarnye Zori-95" took place. It was organised by the RF Ministry for Situations of Emergency in co-operation with the UN DHA.

- 304. For the past years, an immense experience in overcoming the accident consequences in a number of practical directions pertaining to various fields of science and engineering (medicine, agriculture, environmental protection, work with population, etc.) has been gained.
- 305. To use this experience, the State Program incorporates a major information project, namely, the "Chernobyl" administrative information system with the central bank of generalised data at the Nuclear Safety Institute of the Russian Academy of Sciences (IBRAE RAS, Moscow), in which the evidence on radiohygienic, ecological, sociopsychological, and economic aspects of the accident is being accumulated. In this information system, acquisition and systemisation of data is accompanied by development and operation of information systems on the problem as well as systems for decision-making support and training systems.

General Analysis of Unesco activities

A. Belarussian Analysis

306. UNESCO-Chernobyl Programme – organisational, human and financial resources

In 1990 four years after the Chernobyl accident the USSR Government together with the Council of Ministers of Belorussian SSR and Ukrainian SST appealed to the foreign governments and international organisations for assistance in mitigation of the consequences of the Chernobyl disaster, comprehension of which was reached steadily as the time passed by.

- 307. In the beginning of July 1990 UNESCO signed a primary agreement with the USSR on commissioning a mid-term programme of co-operation under the title "UNESCO-Chernobyl". The programme included the following three components:
- 1. International expertise in the field of education, science, culture and communications;
- 2. Implementation of projects aimed at informing of the international community on the accident, its consequences and lessons;
- 3. Establishment of a fund of the UNESCO-Chernobyl programme in order to accumulate finances for realisation of certain UNESCO projects.
- 308. UNESCO in co-operation with the soviet authorities in three republics affected by the catastrophe defined the fields requesting urgent international assistance for overcoming the consequences of the Chernobyl catastrophe.

The UNESCO-Chernobyl programme projects were mainly focused on solution of questions related to human aspects of the catastrophe.

309. In its totality during the initial stage of its realisation the UNESCO-Chernobyl

programme included about 70 projects in different field of activity, such as health protection, ecology and culture, agriculture and cattle breeding, forestry, decontamination and scientific-research activity.

- 310. It is worth stressing that the majority of the projects of the UNESCO-Chernobyl programme have not been implemented, which can be explained in the following way:
- 1. The UNESCO-Chernobyl programme was not a budgetary one and the finances for its realisation were coming from charity sources. Due to financial difficulties only some of the projects could have been implemented within the programme.
- 2. The Soviet Union collapsed in 1991. All the former republics regained their independence. Thus starting from 1992 the Republic of Belarus in fact was left alone face to face with the Chernobyl catastrophe and continued participation in the UNESCO-Chernobyl programme by its one.
- 311. The most significant from financial and symbolical points of view became the Project No.64 titled "Establishment of the centres of socio-psychological rehabilitation of the population affected by the catastrophe at the Chernobyl nuclear power plant". In fact the project realisation started from drafting operational plan on establishment of the centres, which was signed by the UNESCO Executive Direction and the Government of the Republic of Belarus and envisaged certain responsibilities of the parties.
- 312. In accordance with the operational plan the belorussian party constructed a new building in the village Streshin, reconstructed a building in the village Pershai and allocated a building in Aksakovshina for the premises of the centres. The work was carried out together with UNESCO on a cost-share basis. Belarussian party developed necessary normative-legislative documents, which defined the status of the centres, their activity and settled the financial aspects of the centres' activity.
- 313. UNESCO in its turn found money for the cost-share financing of construction of the premises for the centres, conducted three training sessions for the centres associates with participation of foreign specialists, provided pedagogical material and instruments, communication means, computer and other office equipment, audio and video equipment, special and office furniture.

B. Russian Analysis, Valery Saharov

314. Contribution to the case study on defining and implementing measures to address socio-psychological impact produced on populations in the aftermath of natural and technological disasters

Situation in 1991 and beginning of the UNESCO activity in response to the affected states request

315. Diversity and complexity of the consequences of 1986 catastrophe at the Chernobyl Nuclear Power Plant have only come to light to their full in the beginning of the 90s. During the first period the "liquidating" measures implemented in the

USSR were primarily protective in nature and oriented mostly to prevent further irradiation of the population in excess of the fixed dose limits.

- 316. They included various restrictions on vital functions, clean-up operations, resettlement of residents. The measures allowed to reduce significantly the doses of irradiation of the population but upset the habitual way of life of hundreds of thousands of people and became an additional factor of the aggravation of the social-political situation, which could negatively affect the "perestroika" process.
- 317. Neither competent Soviet nor conforming international organisations (WHO, IAEA) oriented to the radiological approaches have failed to fully assess the role of social, psychological and political factors. At the same time the experience of the first years after the catastrophe demonstrated that efficient measures to alleviate the Chernobyl catastrophe effects could be implemented only in baling at the State level of all the investment, ecological, economic, and social problems of the contaminated regions. (The failure of the attempt to implement the first regional programme in the Bryansk Region in 1988 was a conclusive proof to this).
- 318. At the beginning of 1990 the USSR Government realised the scale and complexity of the problem of not only the survival but also of the full rehabilitation of the 4 million people affected. That resulted on the one hand in adoption of the so-called "concept of living at contaminated territories" as well as of the ensuing from it Law "On Social Protection of the Population Affected by Radiation as Result of the Accident at the Chernobyl NPP" and "The Unified State Programme on Protection of the Population of the Russian Federation against Consequences of the Chernobyl Catastrophe."
- 319. On the other hand the necessity to turn for help to foreign governments, international organisations and international community at whole was admitted. The known changes in the social life and in national political structure in the 90s objectively broaden the possibilities and perspectives of the transition towards the rehabilitation phase based on the more active involvement of the means of the world community.
- 320. Principles and direction of this involvement were formulated in the resolution 45/190 adopted by the General Assembly of the United Nations on 14 January 1991. In the resolution the member countries were called to the wide co-operation in order to overcome by joint efforts the dangerous lingering consequences of the Chernobyl Accident, while it was proposed to the General Secretary to implement the necessary measures to attract the means of all the agencies of the UN system.
- 321. UNESCO was one of the first to respond to the appeal for help in overcoming the consequences of the Chernobyl Accident lanced by the USSR government on the eve of 1990 to all the world governments and international organisations. Already in February 1990 the Director-General F.Mayor took a decision to implement an inter-sector programme "UNESCO-Chernobyl". The functions of the Secretariat of the future Programme were assigned to the Modernisation and Innovation Unit which started the working out of the draft of the interdisciplinary medium-term Programme and related agreements.

- 322. On 1 June 1990 UNESCO and the USSR signed an initial agreement regarding the establishment and implementation of a programme of scientific research, planning and assistance, awareness-building and fund-raising. Right after that in co-operation with the Committee of the Council of Ministers of the USSR the Secretariat started elaboration of the work-plan for the future Programme and began to carry out measures to mobilise public opinion and to raise sponsor funds.
- 323. The activity initiated by the Director-General from the very beginning was closely co-ordinated with efforts undertook in the framework of the UN system at whole. Since April 1990 UNESCO took part in the work of the UN Interdepartmental Committee on elimination of the nuclear accidents consequences, and later in the work of the UN Workgroup on the Chernobyl problems. In the Joint plan of the Specialised Agencies of the UN system (was in force in 1991-1997) worked up by the Group a significant place was reserved for UNESCO.
- 324. The Draft Programme worked-out in October 1990 was introduced to the Soviet party and was approved by it in principle. On the 135th session of the UNESCO Executive Council the USSR, Ukraine and Belarus delegations came out with a draft of the resolution that empowered the Director-General to prepare a special project aimed at developing international co-operation with a view to contributing, in UNESCO's fields of competence, to the elimination (minimisation) of the consequences of the accident at the CNPP. In the adopted resolution 135/EX 5.1.1 (II) the Executive Council
- 325. "Requested the Director-General, in the preparation of the Draft Programme and Budget for 1992-1993, to give favourable consideration to the inclusion of a special project aimed at developing international co-operation with a view to contributing, in UNESCO's fields of competence, to the elimination of the consequences of the accident at the Chernobyl nuclear power station, it being understood that the project would be largely self-financing."
- 326. In a year time this decision was confirmed by the 26th session of the UNESCO General Conference. Its 13.5 resolution that was adopted taking into account the according appeal of the United Nations General Assembly from January 14, 1991 (res. 45l 190), confirmed the urgency and importance of the Executive Council adopted decision and specified the directives concerning "UNESCO-Chernobyl" Programme. It was suggested, in particular, that the Director-General

327.

- (a) implements projects under the UNESCO Chernobyl Programme within the framework of the Approved Programme and Budget for 1992-1993 in the education, science, culture and communication sectors:
- (b) takes all possible measures to strengthen the machinery within the UNESCO Secretariat for co-ordinating the implementation of the UNESCO-Chernobyl programme;
- (c) develops co-operation for carrying out this programme with other Specialised Agencies of the United Nations system, international non-governmental organisations and private donors...

328. Additional directives of the UNESCO governing bodies on the Programme were contained in the resolutions of the 146th (June, 1995) Executive Council session, and in those of the 27th (res. 13.3, 1993) and 28th (res. 5.18, 1995) UNESCO General Conference sessions.

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- 329. In a concise form the primarily formulated approaches to the Organisation's activity on the Programme UNESCO-Chernobyl can be viewed as admittance of the necessity to
- directly involve UNESCO into the activity of rendering help to the affected population and member nations,
- recognise interdisciplinary nature of this activity and ensure efficient co-ordination of the relevant efforts in the line of the Secretariat's Programme sectors,
- ensure co-ordination of other UN system Agencies, member nations and nongovernmental organisations with its own activity,
- ensure self-financing of the Programme first of all at the expense of the attraction of donors' funds.
- 330. A "Programme framework" was signed on January 9, 1991 by the Director-General of UNESCO and representatives of Belarus, Ukraine and the former Soviet Union. The initial objectives of Programme were as follows:
- -"essentially focused on coping with the human dimensions of the catastrophe... and on the most urgent priorities in this context, ...act as a catalyst...";
- -"represents a determination to bring to the raised problems real and visible solutions in its fields of competence";
- -"to contribute towards making this catastrophe into an opportunity for modernisation and innovation at all levels as well as becoming the source of renewed creativity".
- 331. Main directions in the UNESCO activity in its fields of competence The co-ordination of separate Secretariat's sectors and donors efforts to implement the projects under the approved Programme naturally became the basis of the UNESCO activity in the interests of population affected in result of the Chernobyl Accident.
- 332. At the same time, as it was noted before, from the very beginning the vigorous efforts were made to inform the public about the activity in the interests of the affected population and initial fund-raising. Those efforts (in the form of selling the Programme's symbols, carrying out arts exhibitions and sales and charity concerts) allowed to raise funds (about \$100 thousands) to embark on preparatory work with sponsors.
- 333. Approved in 1991 "the Programme Framework" included more than 80 different projects in a form of original ideas. According to information given by UNESCO non-budget programme's Sector only 23 of them were somehow financed and were later kept a watch on for certain time, while only on 18 of them there are final reports:

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¹ The beginning of the Programme's final stage in 1997 brought to the front some new priorities mainly connected to the necessity to apply the accumulated experience to render assistance to the greater population groups affected by natural disasters and techno-genic catastrophes. The directives on this account are presented in particular, in resolutions of the 151th session of the Executive Council and the 29th session of the UNESCO General Conference (1997).

334.

- * Project 1. Teach English & French to national experts and staff involved in international programmes and projects
- * Projects 12-16. Supply educational equipment to schools
- * Project 18. Create an educational kit for secondary schools to enhance teaching about radioactivity and environment
- * Project 24. Establish an international research network
- * Project 25-26. Investigate the impact of nuclear power plants on hydrology
- * Project 44. Protect contaminated archives
- * Project 64. Socially and psychologically rehabilitate the affected population
- * Project 33. Resettle displaced persons in an Economic and Social Development Area in Russia
- * Projects 32-34. Develop culturally-adapted prefabricated housing and social facilities
- * Project 35. Attract investors to the new area
- * Projects 70-71-72-81. Provide humanitarian assistance
- * Project 79. Inform the population about the effects
 - 335. It should be noted that in consideration with current needs and available means UCP Secretariat made alterations in a number of projects, on its own closed or united some of them with others.

Out of the really started Programme's objects the one that took the lead rather soon was the project "Creation of Supporting Family Centres" (today title "Creation of Psycho-social Rehabilitation Centres" was adopted in the joint documents only in 1994).

- 336. In accordance with "Operational Plans" signed with Committees on Chernobyl of the three beneficiary countries in the beginning of 1993 the assistance was rendered in sponsor funds raising, drawing experts and subcontract firms in planning, building and equipping 9 centres of that kind in contaminated areas in Ukraine, Russia and Belarus.
- 337. Put in operation in the beginning of 1994 they managed to embark quickly on active social and psychological, mass cultural and educational work with population of total number of up to 100 thousand people, first of all with those who were obliged to resettle, but also with indigenous population as well.
- 338. The Centres' activity was provided for by UNESCO mainly in the form of delivery of equipment (film and slide projectors, videotape recorders, computer and duplicating techniques), as well as of print and video products, didactic materials. The support of the Centres personnel of a total number of about 100 people was expressed also in the form of financing the work of National Co-ordinators and Scientific Supervisors, and carrying out methods conferences and organising courses for professional skills improvement, and the like.
- 339. The population and local authorities repeatedly highly estimated the activity of the Centres, that in the majority of cases became not only social and psychological institutions but true cultural centres, peculiar "bridges" over the gap between administration and civil society.

- 340. One of the most "capital intensive" perspective Programme Projects was that of designing "Economic and Social Development Areas" to accommodate the migrants in the town of Gagarin (Russia). It was the matter of equipping territory of 200 ha with the purpose of resettling 30-50 thousand people from the most contaminated by radiation regions and in order to create there a science-based structure of their life-sustenance, including creation of working places.
- 341. Estimated cost of the project equals \$330 mln, period of its realisation is 7 years. By now with help of EU, France, Denmark and Germany the working out of the General plan of the future "zone" is completed. Its realisation is delayed due to the problem of creation of the Russian National Agency in charge of building and developing the legal base for co-operation with potential foreign investors.
- 342. The majority of projects really carried out in the framework of the Programme were not considerably developed owing to the absence of interest from the sponsors and were suspended after preliminary planning. Some of the long-term projects backed either from the UNESCO regular budget, or at the expense of charity donations or through the preferential participation of other international organisations and funds were still carried out until lately, although they did not make any significant noticeable contribution into elimination of the consequences of the Chernobyl Accident.
- 343. Into this, the biggest, group of projects were incorporated, first of all, those of scientific and cultural aspects. Five projects in the scientific research sphere on the topics of hydrologic and geo-chemical consequences of the Accident, of monitoring radioactive "spots" mobility (geographic information system), of creation of international radio-ecological laboratory and others were financed by the programme on the initial stage, but were not implemented because of the absence of sponsor support. The biggest progress was achieved in setting up under UNESCO MAB Programme support of international network of ecological studies in the regions of radioactive contamination: in 1992-1995 a number of scientific conferences attended by representatives from 20 countries were hold.
- 344. The activity of the Programme in the sphere of culture was limited to financing the mission studying the impact of the Accident on the archives safety, its conclusions were later passed to the EU institutions. Planned examination of the state and safety of cultural objects in the "Chernobyl zone" was cancelled because of the failure of the large-scale project to organise under the aegis of UNESCO a travelling exhibition of famous works of art from three countries ("EGORA project") the revenues from which were to finance the examination.
- 345. In the framework of the Programme there were built up contacts between national conservatories of three beneficiary countries and the international musical elucidative association "Music of Hope" which supported organisation of instruction for young musicians from the affected regions.
- 346. More significant turned out to be the progress in implementation of educational projects. First of all, it was organisation of language courses for

specialists involved in the elimination (minimisation) of the Accident's consequences and for instructors of the institutes of higher education (about 100 people in total).

- 347. The assistance of some French and Belgian Universities allowed not only to back this work but also to organise several study courses abroad for instructors and educators-psychologists of the Centres of Psycho-social Rehabilitation. Under support of the World Health Organisation and the government of the Netherlands the linguistic courses were offered in those same Centres.
- 348. Another tendency in this field was creation of an educational kit for secondary schools to enhance teaching "Power engineering -development-environment". In this project the UNESCO Associated Schools and some NGO from the Netherlands and France took part. Under the EU support the work on the popular journal on the problems of radiation for the young and the affected population was carried out.
- 349. Finally, with Programme's assistance the delivery of educational equipment and sports goods and computers made for several schools should be mentioned. Information and Communication sector of the UNESCO Secretariat was co-operating —with Programme's co-ordination and TASIS funding with national institutions and experts in working out and implementing the plan of modernisation of the means and systems to inform population in the regions of the "Chernobyl zone".
- 350. In the sphere of health protection the UCP's (UNESCO-Chernobyl Programme) contribution included first, organisation of charity delivery of medical supplies, equipment and clothes for several hospitals in the contaminated regions (they were financed by the EU and the Canadian government, then the French Red Cross and the Maltese Order). Second, at the initial period of its existence the Programme rendered considerable support in setting up and developing rather wide network of reception by the West-European countries of the affected children for their rest and treatment.
- 351. With the Programme's assistance it was made possible to attract substantial funds as well as technical and humanitarian aid in the interests of not only people directly affected in result of the accident but also of much wider groups of population, primarily in the remote country regions. Creation of such objects as Psycho-social Rehabilitation Centres focused the attention of local authorities and also of some central departments and mass media on the social, educational and cultural problems of the population, and sometimes as in the case with Economic and Social Development Area it fostered economic activity.
- 352. The programme's activity that had an impact on the dozens of thousands greatly contributed to the consolidation of the UNESCO positive image in the mass consciousness.

Established institutional structures and implementation of measures to eliminate consequences of the accident

353. Considering the complex nature of the Programme that united dozens of various projects in the lines of all Programme's sectors, as well as individual initiatives of one-off nature (for a particular moment), the paramount attention was

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given to formation of an effective structure of management and co-ordination of measures for elimination (minimisation) of the consequences Chernobyl Accident in UNESCO fields of competence. The main elements of this structure were first conceived in the Programme Framework approved by the Soviet party in January 1991 and then consolidated in the decree of the UNESCO Director-General (DDG/P/Memo/91/16 form 30.1.91)

- 354. As the highest authority and the decision-maker of the Programme the Steering Committee was established and it was made up of high-level representatives of the three beneficiary countries appointed by the governments' decisions (first of all, the heads of Committees on the Chernobyl Affairs of those countries and these countries' permanent representatives in UNESCO) as well as several high level representatives form UNESCO chosen by the Director-General. The Deputy Director-General (DDG) was appointed as chairman.
- 355. Among the functions of this body were:
- 1) to supervise the development of the Programme, to give direction and indicate key priorities to the Programme team;
- 2) to identify and to solve operational difficulties;
- 3) to conduct any necessary negotiations between UNESCO and the beneficiary countries of the Programme;
- 4) to rule on issues brought forward by the Secretariat of the Programme UNESCO-Chernobyl (UCP Secretariat).
- 356. It was also presupposed that the routine (operational) activity in the framework of the Programme of different sectors and Central Services of the UNESCO Secretariat would be directed by the Co-ordinating Committee, which was to be presided over by the DDG and to include the conforming Deputy Director-Generals in Programme's sectors (ADG's), sector co-ordinators and representatives of Central Services. Its mission was to advise and assist the UCP Secretariat and with this view it was to meet once every three months given that it was the job of the UCP Secretariat to call these meetings.
- During all these 7 years of the Programme's existence the practical management of its projects implementation was carried out by the UCP Secretariat (originally "task force" on the basis of the Modernisation and Innovation Unit of the UNESCO Secretariat). This unit had the following goals:
- to manage the Programme;
- to co-ordinate the fund-raising operations;
- ♦ to supervise the experimental stage of the launching of projects, which were supposed to be later transferred to the relevant sectors².

² in reality the whole range of projects, such as Psycho-social Rehabilitation Centres (Project 64), all the fundraising and public information projects etc.-were managed totally by the UCP Secretariat

358. Finally, the UCP Secretariat activity was to closely co-operate with Sector Co-ordinators for the Programme and Project supervisors (there including local and national supervisors), in particular, in questions of correcting the sectors' budgets in favour of one or other project or of extending some already implemented projects in the interests of the Programme. Besides, their functions were to relay information on the Programme to the Sectors; to identify problems in the Sectors which called assistance from the UCP Secretariat; to represent the Sector in external relations.

PART 3- THE UNESCO CHERNOBYL PROGRAMME COMMUNITY SOCIAL and PSYCHOLOGICAL REHABILITATION CENTRES, Project 64 Development

C. Ukrainian analysis

359. The Program was designed specifically - within the fields of expertise of the Organisation - to respond to the human side of this accident. This program contains 60 complementary projects to operationalise this broad goal.

The underlying framework of the development of the psychological rehabilitation centres takes into full account the working hypotheses established for the Program in 1991. To paraphrase:

- 1)"...it is the ecological and human, social and economic consequences which have most disrupted the daily life of the inhabitants and the future of the entire region."
- 2)"...its consequences cannot be isolated from the difficulties that the Republics and the Russian Federation, (sic) are currently facing."
- 3)"...cannot be exclusively centred around limited curative action..." and "... must inevitably be involved in the process of modernisation...". "It is thus not possible to separate emergency action from development activities."
- 4) "Chernobyl is an opportunity for exceptional co-operation, as much within the former USSR, as on the international scale".
- 5)"...taking into account the main train of influence regarding the general evolution of the countries..." (sic).

GENERAL PROJECT ORIENTATION

360. The UNESCO-Chernobyl Program was designed specifically - within the fields of expertise of the Organisation - to respond to the human aspect of this accident. The underlying framework of the development of the psychological rehabilitation Centres takes into full account the working hypotheses established for the Program in 1991.

361. To paraphrase:

"...it is the ecological and human, social and economic consequences which have most disrupted the daily life of the inhabitants and the future of the entire region."

"Chernobyl is an opportunity for exceptional co-operation, as much within the former USSR, as on the international scale".

"its consequences cannot be isolated from the difficulties that the Republics and the Russian Federation, (sic) are currently facing."

362. The original framework for this project states that general improvements in child survival and development will depend on improvements not only in the home but also in the community environment that protects, nourishes, socialises and challenges the young.

363. Community development, as defined by Organisations such as UNESCO, UNICEF and WHO, refers to improvements in conditions of life, including income, health, food, shelter, sanitation and recreation and to changes in knowledge and organisation allowing communities and individuals greater decision-making power and control over their lives.

Within this framework the Project to Develop Community Social and Psychological Rehabilitation Centres was begun with an original concept to study, organise, train personnel for and begin for such centres within what was then the Soviet Union.

364. This project has since expanded to nine centres, three in the Republic of Belarus, three in Ukraine and three in the Federal Republic of Russia. These centres are jointly funded by the Canadian Government, two NGO's Diakonisches Werk and Caritas from the Federal Republic of Germany, UNICEF, and the UN Task-force on Chernobyl, Hilsfonds and other UNESCO Extra-budgetary funds. All three host governments, despite very difficult economic circumstances, due to the priority placed on this project, have spent and continue to spend a substantial funds on the project implementation.

Tasks and goals of socio-psychological rehabilitation

365. Community is usually viewed as a source of security and stability, both for the individual, the family and the group. Shared values, shared commitments and common activities often provide a sense of identity as well as mutual caring; support systems develop, care of public space develops, as well as empowerment.

When human and individual needs are seen in the context of systems terms, emphasising process and transitions, structures change and flexibility evolves. This has profound implications for intervention strategies; the individual is then regarded as a member of a group or a part of a whole. When the community is empowered so is the individual.

366. The primary goal of the community centres thus becomes empowerment of the community.

The objectives: interest in the conditions of life; deliberate effort to modify the social conditions, not from the outside but through a process generated from within; commitment to change; involvement in a problem solving process; and a desire to make decisions.

- 367. Information becomes a major component of this process. Information and a free exchange of opinions regarding the consequences of the Chernobyl Accident as well as the rights of the individual regarding these consequences, thus, is a major aspect of the programme of each centre.
- 368. In the Gomel region (Havenaar, 1992, unpublished) shows a prevalence of high scores on questions concerning health. Women with children born between 1975 and 1986 received the highest score on psychological complaints.

Further there are many myths and beliefs regarding illnesses caused by the disaster as well as their cures. For example, it was, immediately after the accident, widely held, by professionals and lay people that the consumption of red wine decreases or completely nullifies the effects of radiation. As in any part of the world there is good research and charlatan research, there is valid information and unproved

information, would be politicians use any disaster to their benefits. It is difficult for the lay person to decipher this information.

369. In addition, living in what is labelled a 'zone', given the above, originates suspicions about one's own health state.

According to the laws each child living in a contaminated area or evacuated (if in utero during the accident or a young child during the accident) has the right to a one or two month (depending on the level of contamination) stay, annually, at the government's expense, in a clean zone with clean food products.

370. Mental Health services

Historically, psychotherapy, psychological services and social work, as we understand it in Europe and North America has not been available in the republics while psychology was limited to experimental psychology (with few studying it as a speciality) and instruction in developmental psychology, mainly for teachers. In Ukraine, for example, with a population of fifty two million, the total number of psychologists (including those from other professions with but nine months training) in January 1993, was approximately 1,450. Psychologists with a full university program in psychology numbered about 800. A portion of these had an M.A. or PhD equivalent degree. The total number of psychiatrists was 4,000.

- 371. Psychotherapy and practical psychology are being implemented and are often perceived as something that is done to the individual; as opposed to a process within the individual, a process of which he is an active participant. Individuals (referred to as patients) are often treated in isolation of the family and outside his or her physical and social environment. As in most societies, people search for therapies which do not require 'work and effort' from the individual seeking the therapy.
- 372. Psychotherapy often stresses relaxation techniques, with sauna, herbals and chemical baths, herbals steams, massage, electro-magnetic treatments, hypnosis, 'suggestology', and audio training.
- 373. Depression, considered to be a common symptom of post Chernobyl trauma, is treated with anti-depressants and relaxation techniques; often in sanatorium settings for periods of three to six weeks. Lack of medication is considered to be the most serious difficulty in dealing with depression. There are many research results regarding psychological, pathological and neurophysiological changes in members of the population after the Chernobyl accident. Is this physiological or situation?
- 374. Although victimisation is a prevalent symptom, related not only to the Chernobyl accident, programs or adapted therapies to help adults and children reestablish control over their lives, take responsibility for changing their environment or cope with changing life styles are only in the beginning stages. The locus of control for individuals is changing and this process is very difficult on some.
- 375. In some areas whole villages and towns were evacuated as a unit, thus recreating full classrooms of Chernobyl children. The children born immediately after the accident have now entered school. Given the results of current local research, teacher observation and year end school success, some schools are adapting academic programs to meet the perceived 'intellectual needs' of these children with lessons being shortened from 40 to 30 minutes each and the academic program

being slowed down.

376. Are these children intellectually delayed? Do they have learning disabilities? Do they have an Attentional Deficit Disorder? Has their normal early childhood development been situationally interfered with? Are they living in stressful situations incapable of concentrating and memorising? Do they need a different educational approach as opposed to shortened lessons? These are all questions that need to be answered for the future of these children and the communities they live in.

377. Risk Groups

There are three distinct groups variously affected by the disaster, these are: Liquidators, evacuees, and those still living within contaminated areas.

The populations within these groups share many of the same stresses. Concern about health is a major factor affecting all. Given the aftermath of the Chernobyl disaster, the methods of information dissemination in the post disaster years and the network of informal information flows, the stress level regarding the consequences, both present and future to health and social structure is high.

- 378. Further, as with much of the population these groups were accustomed to being taken care of and provided for by institutions, institutions which also tended to make personal decisions for the population. This has left individuals with a lack of a feeling of empowerment. Finally, the feeling of being a victim is strong within all these groups.
- 379. Due to the continuing disruption of the political and economic system, anxiety about the future (political, social and economic) is affecting everyone's daily lives.

There are also stresses unique to each risk group.

<u>Liquidators</u>, depending on their duties at the time of liquidation, and depending on their current state of health, are either in hospital, or, worry about serious health consequences, early morbidity, impotence, future employment and genetic abnormalities in their children. They often feel incompetent and unnecessary for other family members.

- 380. <u>Evacuees</u> suffer from the consequences of family and community disruption and lack of productive work in their new settlements while worrying about the economic future, both personal and regional. Having children who were exposed to higher doses of radiation in the first days after the accident the evacuees are constantly concerned about serious health consequences and the development of their children.
- 381. Those still <u>living in the contaminated zones</u> deal with the stress of living with various degrees of radiation, lack of proper information and insecurity about safety of the food they eat as well as the development of their children.

Within these risk groups the populations which need most attention are Children born after the disaster; Adolescents (who were themselves young children at the time), Parents with small children.

383. Family mental health

Healthy, functional adults are raised in healthy families. It is not our goal to import the

definition of a healthy family from another culture; the definition and structure of a healthy family system must develop within the context of the traditions and values of the culture itself. These values and traditions are currently in a state of flux, being questioned, changed and modified as the economy and social structure of the societies, in the region are being reconstructed. In addition, families directly affected by the Chernobyl accident are for various reasons experiencing a stress of their own.

384. The goal of the Community Centres, in relation to family health will be to revitalise the evolution of healthy family systems within the cultural context of the societies in which they live. The objectives: to improve cohesion within the family; to develop adaptability; and to open communication lines.

386. Adolescents

The goal of the community centre is thus to enable the adolescent to assume control over his/her life and future, and learn responsibility. The objectives: to enable identity development; to develop responsibility; to allow for the expression and resolution of fears and anger and develop health relationship skills.

387. Children

Childhood is often defined as the period in life when an individual develops his self concept and begins to develop his identity. The goal of the community centre is to enable the child to develop a positive, healthy self concept.

The objectives: to assure maximum intellectual development; to help the child understand and resolve fears and anger; to encourage within the child a feeling of health; and to allow for the development of self control and a positive self-concept.

388. Work of a psychologist in the Centres of Socio-Psychological Rehabilitation

Belarussian Analysis

It will be difficult for a foreign reader, though being a professional psychologist, to understand peculiarity of the complex work in the UNESCO centres without knowledge on the general situation in the beginning of 90th in the field of practical psychology in the former USSR and particularly in Belarus.

- 389. Practical psychology was developing in the USSR within the frames of academic psychology, which was strictly focused on the Marxist philosophy, and grasped all its limitations and drawbacks. The most difficult situation happened with psychotherapy. All soviet psychotherapy was developing exclusively as a clinical discipline in the frames of a medical model. At the same time it turned out to be completely away from achievements of the soviet experimental psychology and psychology of personality and conscience.
- 390. One of the causes was that of a special "psychoanalysisphobia", which was expressed in a straightforward avoidance of practically all questions raised by the theory and practice of psychoanalysis (problems of unconscious, protection mechanisms, role of extramental motives in human behaviour, converse symptoms etc.). Therefore, the theory of conditioned reflex, based on the human "common

sense" psychology of life, served as a theoretical basis for the soviet psychotherapy. A natural outcome of this situation was one-sided or lopsided development of psychotherapy mainly as a directive-monologues suggestive and explanatory science.

- 391. In psychology this led to scholastic theorisation, limitation to the borders of academic institutions, run away from real problems of certain people. After successful ideological Stalin's battles in thirties with "hostile theories" and particularly with soviet psychoanalysis, the profession of a psychotherapist was existing just as a medical speciality. Even in the beginning of eighties when invasion of psychologists into the field of direct practical work with real people became irreversible, the psychologists were suggested to carry out mysterious "psychocorrection" (which was described as a psychotherapy but with no application of medicines) and not psychotherapy itself (because this fell into the field of competence of people with medical education).
- 392. Simultaneously with social changes in the end of 80th, an impetuous growth of the so-called "practical psychology" was taking place. There appeared many private practical psychologists, who proposed a wide spectrum of psychological services from diagnostics to different forms of therapy. At the state level, such tendency took form of introduction in schools of the so called "school psychologists". These people were charged with diagnostics of children preparedness to school education, identification of causes of low achievements, consultation of parents, schoolchildren, pedagogues, as well as psychocorrection.
- 393. Such an increase in number of psychologists gave birth to a new problem a very low level of their professional competence. Former teachers, who passed post graduate education courses with the duration period varying from 2-3 to 9-months, became psychologists in school. Such courses appeared like mushrooms after a rain and in the beginning of 90^{th} , every provincial pedagogical institute was preparing "practical psychologists". By the recent times there have been only three universities in the USSR where students could get a complete 5 year psychological education.
- 394. Nowadays psychologists-practitioners feel themselves quite self-confident on the "territory" of client-oriented therapy, gestalt-therapy, psychodrama, NLP etc. However, more often such confidence is based on the quite casual study of different psychotherapeutic approaches. In the majority of cases, psychologists became representatives of this or that psychotherapeutic tradition after a single participation in a training seminar conducted by a western psychotherapist.
- 395. For the last years hundreds of missionaries-psychotherapists, firstly from the USA, carried out their workshops in order "to enlighten the ignorant souls". Previous psychotherapeutic vacuum made psychologists omnivorous, ready to digest any new psychotherapeutic technology irrespectively from the situation whether it corresponds to the "soviet client" mentality or not.
- 396. As a rule, philosophic-anthropological and cultural basis and gestalt therapy and psychodrama and Jungian therapy are ignored as having no pragmatic value. The result of this is "technologisation" of psychotherapy basing on the principle "psychotherapy for psychotherapy". It is sad to notice that by this time the main

source of income for the majority of such psychotherapists was not the work with real clients but conduct of workshops for other psychologists first of all those coming from province. Such a tendency was best of all exposed at the example of NLP (neuro-linguistic programming):

- 397. The external simplicity and effectiveness of this method, simplicity of theoretical basis and creativity of western NLP-therapists turned hundreds of psychologists of the former USSR into disciples of this method. However, as analysis shows, in conditions of our culture as compared to American, effectiveness of the NLP focused on a cognitive-simple client was rather low. Moreover, in our culture the effectiveness of psychotherapy is defined by the movement at the level "despair-sense" rather than in behavioural sense "success-failure", which is closer to American culture. "What is good for Russians is death for Americans". A natural aspiration for the most reflexive psychotherapists was either investigation of culture-specific justification for the development of the domestic psychotherapy, or avoidance of any adherence and shift to absolutely eclectic positions.
- 398. In any case, a profession of a practical psychologist is a very young one in the former USSR. In addition, if this profession is quite adequately perceived in big cities, then in the province (in small settlements) psychologists constantly have to face the problem of misunderstanding and antagonism.
- 399. Typical situation is that of comparison and equation of "psychology" to "psychiatry" which is considered by the majority of people as dangerous, totalitarian oriented and inhuman medical practice. To get a psychiatric diagnosis means to become rightless, vulnerable and rejected. Understanding of the psychiatry, of the neuro-psychic diseases and especially in small towns was formed on the level of folklore, anecdotes and funny stories. Voluntary appeal to psychological assistance is practically impossible because this means that a person recognises himself as a crazy one. During long decades the society formed its own unique system of overcoming of psychological difficulties with the central part given to psychological support from relatives and close friends, specific humour, fatalism somewhere near religion, alcohol.
- 400. It is impossible to understand the peculiarity of psychological work in the UNESCO centres without consideration of the social context of the existence of the centres and the concept of socio-psychological rehabilitation of the people affected by the accident at the Chernobyl NPP, in the framework of which the centres are working. This will be done at the example of belarussian centres.
- 401. At the background of numerous comparative analyses of psychological peculiarities of the people affected by the accident at the Chernobyl NPP, there are practically no drafts of rehabilitation programmes. For the twelve years after the accident, a global concept of socio-psychological rehabilitation has not been created yet. There are just some certain approaches towards psychological support of the affected population among which one can separate the two most popular ones:
- 1. "psychological centre" an independent institution where psychologists render psychological assistance to the affected population in the form of individual and family consulting, group and individual therapy, psychodiagnostics etc.;

- 2. "parallel work" when a psychologist, who work in a certain institution like a school or a hospital, during certain time assists to the people affected by the accident at the Chernobyl NPP. This is how the programme of the Ministry of Education of the Republic of Belarus suggests.
- 402. With the due respect to importance of the both approaches, they do have significant limitations. First of all they are focused on the most educated part of the population, which has quite a high level of pedagogical culture to apply for a psychological assistance on a voluntary basis. The second is that a psychologist is completely "tied" to the establishment and has to wait for the clients passively. Third is that all the work is mono-thematic, i.e. is focused exclusively on psychological assistance. Such limitations make both of the approaches effective only in conditions of quite a large settlement. In conditions of a rural area, where the majority of the population affected by the accident at the Chernobyl NPP live, these approaches are not that effective.
- 403. One of the peculiarities of the mentality of a belarussian rural resident is the habit not "to wash one's dirty linen in public", to avoid discussion of serious personal problems with unfamiliar people, people are afraid to be condemned by the society, are afraid to lose own status to be known among the neighbours as a wrong man or as a crazy one. This practically excludes a possibility of voluntary approach of a rural citizen to a psychologist. To go to a psychologist means to admit ones own psychic deficiency before the whole community. That is why in rural centres it is advisable to get rid of the words "psychological rehabilitation".
- 404. Taking into account such conditions, **the following principles** were realised during the first stage of implementation of the UNESCO project:

1. Orientation on usual forms of behaviour and main values of the local population.

A low level of psychological culture of the population required that the basic attention during the first stage of the project should be paid to the work with children and teenagers. The work with smaller children was focused at the elements of play and art therapy as well as application of specialised development and cognitive games. "Good education of children", as it is called, occupies the highest place in the structure of values of a villager. That is why any method of work, which reminds a kindergarten and school, corresponds to the social request and are favoured by the adults.

- 405. The scheme of work of a psychologist with small children is quite traditional:
- 1) identification of a potential client by means of observation the children in the playroom or with the help of information received from the counsellors or creative workers;
- 2) individual discussions with a child with the elements of psychodiagnostics (picture, constructive probes, children projective techniques);
- 3) identification of the objectives and forms of psychological assistance to a child;

- 4) planning and implementation of the joint work with counsellors or creative workers;
- 5) consultation of parents, teachers, kindergarteners on desirable forms of interaction with a child. In all these cases a psychologist avoids using any evaluative characteristics like "retardant", "abnormal", "ill" or special clinic terminology. The basic objective of the work with children is reduction of fear, anxiety, education to the skills of coming into contact with other children, increase of self-rating and self-confidence, creative self-realisation, stimulation of the cognitive development. Serious difficulty in the work of a psychologist is that of impossibility of inclusion of the whole family into the work with a child. That is why very often instead of the wholesome family therapy a psychologist have to limit himself to individual consulting of certain members of a given family.

2. Orientation onto the leading requirements of the local population frustrated as a result of the catastrophe.

- 406. During the work with teenagers first of all a social requirement related to the necessity of communication is realised. It is mainly characterised by group forms: socially-psychological training of communication skills, group discussions, group creative work (painting, theatre etc.).
- 407. Experience shows that confidence to a psychologist reached in the group allows the teenagers to apply for individual assistance more confidentially. Correct tactics of the work of a psychologist with a group allows him to introduce elements of psychotherapeutic techniques, such as psychodrama, gestalt-therapy, and art therapy during the initial stages of the work.

3. Orientation onto the most open channels of communication with the local population.

- 408. In the work with adults who are not keen to discuss their own problems a psychologist is using two main channels of getting information on individual and family difficulties:
- 1) through discussion of problems of a child, who visits the centre;
- 2) through organisation of group activity of adults. Group activity during leisure time was a characteristic of community life of a village both before and during soviet period. Adults do visit and organise themselves traditional for them leisure parties, holidays, concerts, and information meetings.
- 409. The task of a psychologist is to organise these group activities in such a way so that the people start discussion the problems of the village and personal problems.

Another form of realisation of this principle is focusing in the own work at "allies" from the local population, who occupy a higher position in the social hierarchy of the village. Main allies in the rural area are the educational and cultural institutions, which work context corresponds to the work of the centre by their tasks and style. That is why all activities of the centre were carried out in close co-operation with such

institutions.

4. Orientation onto the complex approach to the solution of the most acute problems of the local population.

- 410. Here we talk on the necessity of identification of the most acute problems of the population solutions of which could make it possible to realise the main tasks of the project that of organisation of the self-regulating community.
- 411. Experience shows that solution of such problems is possible only in cases when psychological problems are incorporated into the context of social and economic problems. It is necessary to stress, that nowadays the Chernobyl topic is lower in the minds of people that social and economic problems even between those who love in highly contaminated regions.
- 412. Nevertheless psychologists directly or indirectly are assisting in solution of those problems that are closely connected to the consequences of the Chernobyl catastrophe: they inform on the rules of behaviour in conditions of radioactive contamination, they work with the fears of death and illnesses, they form a positive view on the future within the youth, they stimulate social activity and healthy lifestyle etc.
- 413. At the same time solution of these problems would have been impossible should the most actual social problems were not placed into the top priority tasks of the centre's work: e.g. the problem of free time in Pershai or the problem of conflict between those who were resettled and aborigines in Streshin.
- 414. A super task of the rural centres is creation in the settlement a so called "rehabilitating nature" which would include psychological and economic (like SME), medical (rehabilitation and diagnostics), educational (training to the new professional skills, foreign languages and computer techniques, application of the new educational technologies etc.) and cultural aspects (renaissance of the national traditions). In other words, the concept of the centres is focused on organisation of the so-called "community" inside of which all the population layers actively interact.
- 415. In this respect the centres carry out the role of catalysts for the process of social development aiming at the strengthening of the sense of "we" within the given society at the same time stimulating the growth of social responsibility and orientation to the self-assistance.
- 416. Such approach to rehabilitation of the affected population is the most perspective because from one side it really reclaims and activates social and psychological capabilities of the affected population and from the other side allows with the decline of the acuteness of the Chernobyl topic to reorient the centres of socio-psychological rehabilitation into the centres of social development of the community.
- 417. Such a view of the psychological rehabilitation allows to include psychological work into the wider context of social work and thus increase its effectiveness. Compared to traditional "psychological centre", a psychologist is not waiting here but

goes to a client himself.

- 418. Another concept has been taken when organising the work in the sociopsychological rehabilitation centre "Aksakovshina", which is located on the basis of the clinic of the Scientific Research Clinical Institute of Radiation Medicine and Endocrinology. The main objective of this centre is the psychological assistance to the patients of the clinic and firstly to the children and teenagers. The second objective is to organise psycho-social work with the local community of Aksakovshina.
- 419. The centre is working there as a community centre thus providing the local community with possibilities of social development. During the first stage of the work of the centre maximum attention was paid to the work with the local population because the exact objective was integration with the existent in the community social structures. The result of the work was a network of volunteers movement among children and teenagers and positive changes of the social climate.

420. The work in the clinic includes the following directions and forms:

- participation in the primary reception of the new patients for identification of the requirements in psychological assistance and following direction to the necessary specialist;
- group work with children and teenagers (discussion groups, group therapy, psychological training);
- 421.
- individual work (individual consultations and therapy);
- work with the children and teenagers on overcoming of fear before medical procedures;
- consultative and therapeutically work with families who undergo treatment;
- activation of mental development of children with the help of special developing games in playrooms;
- 422.
- informational activity (lectures, issue of informational bulletins, meetings with specialists on the Chernobyl problems, like lawyers, doctors, representatives of ministries):
- creative activity (organisation of art groups, leisure parties, concerts and exhibitions, issuing of a newspaper and a magazine);
- socially-organisational activity (establishment of a council of communities, organisation of clubs and community groups).
- 423. The central place in the concept in the psycho-social work of the centre with **ill children and teenagers (main diagnosis thyroid cancer)** is occupied by theoretical foundation on psychological defect (primary defect induced by biological trauma in conditions of development lead to secondary defects disturbances in psychic functions appearing on the basis of primary defects).
- 424. The main principles are as follows:
- 1. Situation of the illness lead to significant physical and psychic asthenization of children decreasing possibilities of memory, mentality, attention etc. Besides

- children from the clinic spend much time away from school education. The task of the centre is activation of cognitive abilities of children, training to different means of rational and creative mind through usage specialised development games (for small children) and organisation of psychotechnical groups (for teenagers).
- 2. Negative emotional condition is developing in children in case of threatening illness. Such condition can aggravate pathogenesis of the illness, create additional difficulties if the process of treatment and induce additional psychosomatic disorders. The objective of the centre is to "eradicate" negative feelings by means of play- and art-therapy, training to the self-regulation techniques.
- 3. Situation of illness taking the child away from the usual social environment lead to psychological loneliness, frustration of the necessity in communication, which is especially important for teenagers. The objective of the centre is to organise intensive communication in discussion and training groups.
- 4. Situation of illness and a special social status of "Chernobyl" children lead to distortion of personal development in formation of the "rent" feelings, passivity, orientation on external assistance only. The objective of the centre is to involve children into active social activity of creative nature (publishing of a newspaper and a magazine, creation of a theatre studio etc.).
- 5. Situation of illness form in children an acute feeling of personal deficiency, difference from healthy children, narrowing of temporal personal perspective, contraposition "we are ill" and "they are healthy" thus favouring artificial invalidisation. The objective of the centre is to form the feeling of involvement into real, "healthy" world through active unification of local children and the children from the clinic into all activities carried out by the centre.
- 6. Situation of illness impedes creative realisation of a child through putting the child into conditions of the monotonous life. The objective of the centre is to present each child with a possibility of creative self realisation in numerous interest groups organised in the centre, which are based on the idea of art-therapy rather than on the principles of systematic training of skills.
- 7. Situation with illness creates many peculiar psychological problems for the child himself by changing forms of personal development of children thus impeding education. The objective of the centre is to carry out individual psychological consultation of children and parents both face to face and through "hot line".
- 425. As an example we will describe one very important aspect of the clinical social work connected with such typical problem as refusal of children of young and middle school age from some of medical procedures (endoscopia, biopsy, stomatological treatment, blood analysis). Especial difficulty is observed with children whose thyroid gland was taken out: special neuro-endocrine consequences of such operation significantly decrease susceptibility to stress and favour development of fears of different type.
- 426. The problem is not only in the fact that such refusal make it difficult to treat such children in the clinic and complicate the work of the medical personnel. Early misfortunes in overcoming of emotional stress negatively influence development of children forming the so-called "trained helplessness", which make difficult the following psychological adaptation provoking appearance of additional psychosomatic symptoms.

427. The most frequent reasons for refusal from medical procedures are: past painful experience of such procedures; stories told by other children about the pain during such procedures; typical for children fear of medical manipulations; fear of uncertainty.

The so-called stress "coping" style has a significant meaning for every child. Its effectiveness depends on the following parameters:

428.

- a) type of the "coping behaviour" behavioural or cognitive; problem or emotions oriented; primary or secondary; "contact" or "avoidance" etc.;
- b) personal sense of the procedure (punishment, benefit, unnecessary thing):
- c) individual peculiarity of a child (the level of development, temperament, emotional susceptibility to stress);
- d) past experience of overcoming of fear before medical manipulations:
- e) style of behaviour of the medical personnel;
- f) peculiarity of the environment (i.e. decorations of the cabinet);
- g) stage of the procedure (preparation, implementation, period after the procedure).
- 429. The programme of preparing of the child for a medical procedure is prepared according to these parameters. For this purpose the following methods are used:
- a) play therapy (games with medical plots);
- b) art-therapy (painting of a successive behaviour, reaction in paintings, symbolic use of medical objects syringes, explorers, work with medical fairy-tales);
- c) behavioural therapy (classical desensibilisation, training to the techniques of coping behaviour);
- d) cognitive therapy (cognitive restructuring of the idea of the procedure, stories of the "experienced" children on the successful procedure);
- e) emotional support (as well as the presence of a psychologist during the medical procedure).
- 430. Another example shows peculiarity of the work of the psychologist with a family. The practice of the psychological work with families residing on the contaminated territories as well as with families in which one of the spouses participated in liquidation of the consequences of the accident, shows, that the majority of women experience a strong fear before giving birth to a new child. Fear is present notwithstanding whether the first child has or has not any symptoms of hereditary pathological changes.
- 431. Any aggravation of the health of the child can significantly increase such fears. Fear of wives before giving birth to an sick child favours development in husbands of the feeling of personal deficiency. It is worthy of note that such husbands try to avoid genetic examination fearing to see the proof of such negative diagnosis.
- 432. Wives in their turn may have a fear before pregnancy, which often lead to refusal from sexual intercourse. In the examined families one can often observe the following: a birth of a child after 1986 with a pathology of different character leads to the effect of finding someone to blame.

- 433. In many cases mutual accusations serve as external facade of all unresolved inter-family problems and prevent their correct understanding. Quite often, an ill child in the family turns into the means of pressing onto one of the spouses from the side of another's parents. One of the most effective means of assistance to such families is the systematic family psychotherapy focused on realisation by the spouses of the real causes of inter-family problems.
- 434. Though the concept of psychological rehabilitation in the village and hospital conditions vary significantly from one another, they presuppose mutual accents in the process of training of psychologists working in the centre as follows:
 - 435. Accent on the classical psychological consultation and eclectic orientation on the psychotherapy. Naturally, in the process of training psychologists were acquainting with different forms of the contemporary psychotherapy, but neither of them can be number one in its "clean and pure" form in real work. Especially this concerns psychoanalysis, central notions of which are absolutely antagonistic to the desexualised patriarchal culture of the village. In preparation and permanent improvement of qualification under the supervisor's control, the focus is made on the capabilities of a psychologist to realise the following general psychotherapeutic factors:

436. establishment of a special contact between a psychologist and a client:

 weakening of the tension during the initial stage, based on the capability of a client to discuss his problems with a person whom he would like to get assistance from;

 437. extension of the repertoire of the cognitive schemes at the account of the information received from a psychologist;

 operand modification of the behaviour of a client at the account of positivenegative support from a psychologist as well as corrective emotional experience in therapeutically interrelations;

- acquisition of social skills at the account of identification with a psychologist;

- assimilation and drills of adaptive patterns of behaviour with emotional support from a psychologist.

438.

- 1. Techniques of emotional reaction from art-therapy and play-therapy (this is required by the peculiarity of emotional traumas, related to relocation, illnesses, chronic emotional stress).
- 2. Methods of organisation of group activity (group psychological training of communicative skills, group discussion, support groups, mass activities concerts, holidays, club meetings etc.).
- 3. Methods of activation of cognitive development in games and during specialised psycho-technical group work. This form of work looks very similar to the school activity and is very much appreciated by all parents.
- 439. It is possible to define the basic stages of the development of the activity of the centres on rendering social-psychological assistance to the population affected in the result of the Chernobyl accident:

440.

- a) Integration of the centres into the existing social structure through suggesting forms of activity which are not rejected by the local population (educational programmes for children and teenagers, distribution of the humanitarian assistance, rendering assistance on requests, rehabilitation children abroad, etc.). At this stage the population acts as a passive consumer of the suggested forms of activity. The main objective is to form the positive impression in the local population, turn the centre into the necessary element of the social culture.
- b) Activation of the social activity of the population through involvement of the local residents into the joint programmes traditional for the given community. The most perspective form of activity is organisation of leisure parties, concerts, folklore groups, interest groups (young mothers, pensioners) etc. At this stage, the residents participate more actively in the organisation of their life together with representatives of the centre thus forming the structure of their free time. The objective is to involve into the centre maximum of different groups as active participants of the work.
- 441. Formation of the community with a high level of self-organisation. At this stage the local citizens through the system of the local management (community councils, councils of pensioners etc.) organise themselves their social life thus activating those forms of pending free time, which are requested by the community. The objective is to activate the processes of self-organisation. At this stage the centre turn into a necessary element of the social culture.
- Thus, the work of a psychologist in the centres of socio-psychological rehabilitation is not only psychological work. It includes also the activity of a pedagogue, a social worker, an organiser of the cultural activity, a propagandist and an artist. Unique for the former USSR experience of organisation of practical psychology is very necessary not only in conditions of ecological and man-made disasters.
- 443. Similar centres are becoming especially necessary for the people, who experience difficult times of cardinal social changes. Besides, participants of the Project No. 64 of the UNESCO-Chernobyl Programme are the pioneers of the development of a new sphere of psychological science and practice the psychology of the community development.

Analysis of the settlements selected for the Project

444. Three communities were selected in each of the three countries of Belarus, Ukraine and the Federal Republic of Russia (hereafter Russia). In each country it was the Ministry Responsible for the Consequences of Chernobyl (hereafter Min Chernobyl), the local administration, and the delegated co-ordinate of the UNESCO Chernobyl Programme which made the selection of the communities.

The sites were selected for differing criteria in the three republics. Following is a list of the sites selected, the original reasons for their selection and the current additional problems.

445. In Belarus the communities chosen are:

Streshyn: Ziobin Region, evacuees, integrated community, Gomel Oblast.

Aksakovchyna: Minsk Oblast, radiology hospital.

Pershay: Valozyn Region, contaminated zone.

446. In Russia, as a pilot project, it was decided initially to serve all three risk groups separately. This did not materialise and the three communities chosen represent the following risk groups:

Nikolskaya Sloboda: Bryansk Oblast, new town built for evacuees, and being additionally settled by refugees from other republics, unemployed army personnel.

Stantia Uziovaya: Tula Oblast, in contaminated zone, substantial decrease income and increase in unemployment.

Bolchov: Orlovskaya Gubernya, in contaminated zone.

447. In Ukraine the communities were chosen as follows:

Borodyanka, Kiev Oblast, evacuees, liquidators, contaminated zone.

Slavutych, Kiev Oblast, evacuees from Prypiat and Chernobyl (towns for plant employees), current employees of Chernobyl Plant, contaminated zone

Ivankiv: Kiev Oblast, evacuees, liquidators, first in line to receive liquidators and evacuees during accident, contaminated zone.

448. Characteristics of the community development centres for social and psychological rehabilitation in Belarus.

Community development centre for social and psychological rehabilitation in the village of Aksakovshina

The centre is located in the grounds of the clinic of the Scientific Research Clinical Institute of Radiation Medicine and Endocrinology in the village of Aksakovshina. The clinic accommodates 400 patients at once, adults and children affected by the catastrophe at the Chernobyl NPP. The village inhabits 930 villagers basically children and those employed in the clinic. The average age of the inhabitants is 37 years old.

449. The main task of the centre is social and psychological rehabilitation of the patients of the clinic affected by the consequences of the catastrophe at the Chernobyl NPP and social and psychological support to the inhabitants of the village by means of development and introduction of a complex activities both direct and indirect ones.

450. Community development centre for social and psychological rehabilitation in the village of Pershai

The centre is located in the village of Pershai, Volozhin district, Minsk region, 11 km away from the district centre. The population amounts to 688 people (139 – children under 17, 355 – pensioners, 147 – employees). The village is located in the zone of radioactive contamination (1-5 Ci/km²). The main employment of the citizens is the agricultural activity.

451. The main task of the centre is formation of psycho-social and social and economic problems of the people, finding the ways out of such conditions by means of encouragement and development of self-support and initiatives of the inhabitants, formation of social responsibility, creation of mechanisms of relationship and mutual support inside the community.

452. Community development centre for social and psychological rehabilitation in the village of Streshin

The centre is located in the village of Streshin, Zhlobin district, Gomel region. The village is inhabited by 1538 people (270 children under 15, 617 pensioners, 515 employees).

453. There are two communities built in Streshin for the population resettled from the contaminated by radionuclides territories of the Gomel region. In these settlements there live 256 people. The village is 25 km away from the district centre. The main occupation of the citizens is agriculture, trading, work at the brick factory.

The main task of the centre is to conduct psychological diagnostics, social and psychological work with adults and children (especially with those resettled) who have personal and family problems

454. Characteristics of the community development centres for social and psychological rehabilitation in Russia

Russian Community Centres are located in provincial placements and differ from each other by their structure, socio-economical and demographic situation. Altogether there four Centres in Russia: in Uzlovaya, Tula Oblast (settlement of evacuees); in Nikolskaya Sloboda, Bryansk Oblast; in Bolhov, Oryel Oblast and in Gagarin, Smolensk Oblast (created in 1998).

Currently the Centres have the status of well-developed socio-psychological services, which could be used as a model when coping with and overcoming the crises.

455. **Uzlovaya Centre** is a perfect pattern of social and psychological service in a small town. Uzlovaya and its district, which do not receive donations from the government and have profitable industry, are experiencing typical socio-economical problems. Ecological troubles are caused not only by radiation, but by peculiarities of local industry as well.

456. Community Centre was created in close co-operation and with assistance of municipal authorities and district health care institutions. Since 1998 it is subordinate to District department of education and is co-operating with District departments for children and youth and for social protection.

Centre's staff: 5 psychologists (including deputy manager), 2 social workers, 2 day care workers and 1 activity organiser.

- 457. Uzlovaya Centre is working on 2 levels : micro and macro level.
- Micro level, which includes individual, group and mass work has several directions: socio-psychological, psycho-pedagogical, analytical and informational (sociological service), cultural and educational. Specialists are closely co-operating with each other and one cannot but mention the dynamics of their co-operation. Immediately after Centre's creation, educational activities directed on forming the demand for social and psychological support among population were of the greatest importance.
- 458. Due to informational and educational activities and support groups, adequate types of psychological support were identified. First of all, these activities were developed for liquidators and their families, and social risk groups who appeared to be the victims of crises. Work was aimed at diminishing of psychological tension, anxiety, and non-protectiveness. Information on ecological situation, legal and social protection, psychological self regulation and coping with crisis was proposed to population.
- 459. Support groups, using educational, informational and cultural programs, initiated specialised psychological support such as individual consulting and training courses of individual development.

To-day micro-level includes consulting the parents on children's developmental disorders, on "parents – children" relations and, when necessary, on spouses' and family relations.

Adequate and successful psychological support serves as advertisement, for it is informally spread within the community, and promotes mental health management.

460. Special accent should be made on work with adolescents, who are easily involved in all kinds of mass, group and individual activities.

Mass, group and individual activities with youth and adolescents on the problems of family planning, psychology and ethics and interpersonal relations are of special demand.

Adolescents of social risk groups are attracted into cultural and educational programs as leaders and volunteers.

- 461. Work with population appeared to be in the centre of social, economical and political crises is the most difficult one. It includes meetings with and consulting the liquidators, having problems with receiving benefits and donations from the government, young men who took part in military operations in Afghanistan and Chechen republic, representatives of risk professions (firemen, militia, military, etc.).
- 462. At the meetings these groups receive social and legal support and learn how to cope with the crises and stress and adapt to new conditions. Besides, in Uzlovaya Centre they worked out and applied the unique program directed on correction of the relation in the families having juvenile delinquents.

- 463. Macro-level activities include strategic programs of Centre's co-operation with different institutions, establishments and public movements. These are joint educational, cultural and healthy life style programs of the Centre and medical, administrative and educational institutions. "Adolescent" city program is a good example of such activities. It is addressed for teachers, parents and adolescents. The program is realised in close co-operation with Oblast centre of family planing.
- 464. Within the framework of the program, sociological research was delivered. It revealed social and psychological characteristics of adolescents and peculiarities of their relations with teachers and parents. Programs for adults include the ones promoting parental competence, educational programs on healthy life style, small business, programs on alcohol and drug addiction, etc.
- 465. Lately the Centre became the initiator of district social and psychological services. It proposes training courses for city and district school psychologists, methodological trainings on the request of District department of education. Thus, Uzlovaya Centre both has good professional specialisation and provides integrative support to organisations, groups and individuals.
- 466. **Community Centre in Nikolskaya Sloboda**, which is a settlement of evacuees from contaminated territories of Bryansk Oblast is a model of social and psychological service functioning under conditions of rural area. It provides socio-psychological, socio-medical, socio-legal and every day life support to population.
- 467. Socio-psychological aspect covers family consulting and support, "children, parents, old people" relations, work with adolescents, old people, cultural, creative and educational programs. Activities of centre are closely connected with each other. Therefore, all specialists are involved in 2 or 3 programs simultaneously.
- 468. On micro-level professionals are working with migrants arrived in Nikolskaya Sloboda from Chernobyl contaminated territories and "hot spots" in Asia and Caucasus. Main activities are aimed at community integration, coping with social and psychological problems, adapting to new conditions, making contacts and developing relations on a new place, subduing the feeling of homeland loose. Competitions, activities on sharing cultural traditions, "presentations of streets" are conducting by specialists of the Centre.
- 469. All activities have follow-ups, which promotes development and strengthening of contacts and relations among population. Work with old people, the quote of which is the greatest among migrants, is considered to be one the most important one in a Centre. It is also caused by the fact that after social and economical crises of August 1998, psychological tension among then considerably increased. L. Churkova, deputy manager is the leader and initiator of the programs on community rallying.
- 470. Nikolskaya Sloboda Centre has four branches in Zhukovka, Dubrovsk, Rognedin and Klyetnyansk Districts where two or three professionals are permanently working.

On macro-level Community Centre proposes professional programs for employees of district social and psychological services. During the actions delivered by the Centre local authorities and population have the opportunity both to share experience and work out long-term social programs.

- 471. Community Centre carries out round table discussions for social protection departments, employment services, educational, medical and cultural institutions, committees on youth and children affairs. These discussions are delivered with the assistance and under the guidance of supervisor and result in complex humanitarian programs and creation of co-ordination boards on social and psychological activities conducted in a district.
- 472. **Bolhov Centre** is similar to Uzlovaya Centre but because of community peculiarities its activities differs. City of Bolhov receives donations from Oblast and government and does not have profitable industry. Patriarchal character of adults life style impedes the forming of demand for specialised psychological support, i.e. consulting and trainings. Centres' clients are adolescents and healthy life style support groups for liquidators and old people.
- 473. Special accent should be made on long term program of sociological research delivered by V. Teplyakov, deputy manager. It promotes solution of informational and educational tasks, initiates social and cultural activity among population, assists in forming positive view on city perspectives.
- 474. Centre and its employees take part in a program on rebirth of cultural traditions of old Russian city. "Our town" children fine arts competition delivered by Community Centre in close co-operation with Bolhov School of Arts greatly influenced the city adults and resulted in an art project involving representatives of all ages. Literary and theatrical activities are the main content of support groups working in the Centre.

Professional competitions of social workers of Bolhov and its district are delivered on the base of the Community Centre.

475. **Gagarin Centre**

Gagarin is a town located half way from Moscow to Smolensk (200 km from each) in clean area. Before the decay of the Soviet Union the town had well developed industries, especially military branches. Now most of the plants do not function, the level of unemployment is extremely high. There are several educational institutions in the town but no places for the graduates to work.

476. About 1500 people, who were resettled from contaminated areas live in Gagarin. This town was selected as a site for a Community Centre because of the fact that it had been supposed that more resettled people would arrive.

The Centre was opened in March 1998 in a reconstructed building of about 500 sq. Meters. The staff is working with the whole scale of social and psychological problems of the population. Main accent is made on helping homeless children and adolescent which one of the most acute problems in the town.

<u>Characteristics of the community development centres for social and psychological rehabilitation in Ukraina</u>

Models of Community centres for psychosocial rehabilitation

477. Models of Centres operation in Ukraine.

Within the latest years a system of social aid to the population began to take shape in Ukraine. This was caused by growing social and economical problems in the state in general - increase of unemployment, a lot of the enterprises have been closed, level of life decrease, reduction of state medical aid system, etc. The growth of the social problems required the community to join the strengths to provide aid to the most unprotected part of the population.

- 478. People that live in the areas polluted in the consequence of the Chernobyl disaster appear to be suffered twice as much, because with the background of general crisis they are going through specific difficulties. Health problems, senses of hopeless existence, apathy add to many other problems.
- 479. When choosing a place for setting up the centres several factors were taken into account: the number of victims (including also migrants) living in this particular area; presence of specific "Chernobyl problems" and their expressiveness; demographic population structure; administrative subordination of the settlement; well-developed infrastructure.

480. Specificity of the Centres location and communities.

All the Ukrainian centres are located in the small towns, which represent local centres (Slavutich – a town of Oblast subordination). A significant part of the population of these towns ether participated directly in the elimination of the consequences of the Chernobyl disaster, or was moved there from the 30-km zone.

- 481. The problems of vital self-determination in youngsters and teenagers are typical for all localities, where the centres are situated. These problems are professional and personal self determination, health and environment attitude, relationship between the generations, problem of the free time, problem of activity and problem of taking over the responsibility for one's future.
- 482. The community life is greatly influenced by pensioners, migrants and liquidators. It is very difficult for these categories of inhabitants to stand for their interests and rights. It is fairly often, that people even don't know the way to do it under the changed social conditions. That is why the larger part of these people complains about being "abandoned by everybody". Nobody cares about them, they feel themselves unnecessary. All this takes place with the background of low social activity.
- 483. Children of pre-school and junior school ages reflect all these problems like mirrors. They are brought up in the atmosphere, created by adults, percepting and interpreting the above named problems their own way. It is remarkable that in these conditions the level of secondary psychical trauma is quite high. This causes delays in the psychical and social development, passivity, and consumer's attitude towards people, limited spectrum of social relations.

484. Basic areas of activity:

The main task for Ukrainian centres is to increase the social activity of the population, to build up a sense of responsibility for one's destiny, to create social

mechanisms of effective vital activity in the community and to build a vigorous and developing community on this basis.

485. Each centre is represented by a small team of experts (15-35 people) that works with community in the whole and with its representatives in particular, combining the individual, group and mass types of work. Services, provided by the centres are free of charge and available for everybody.

That is why each centre has three basic areas of activity (according to the basic age groups): children of pre-school and junior school age; teenagers and youngsters; adults and aged people.

486. Besides, advertising their activities, the centres accomplish wide informative work, to satisfy the needs of population in finding out more about the environment and elementary hygienic skills, about most actual problems of the community. Information departments or groups conduct such work.

The work with each of these categories varies and has something specific as for each centre. We will further mention only specific tasks and areas of activity of the centres

487. **Borodyanka** is a small industrial town (around 15,000 people), located in the zone of radiological control (1-5 Ci per sq.km, the so-called "fourth zone"). It is 60 km from Kiev.

Borodyanka community has a complicated structure. It looks as it consists of three parts. The first part is native citizens, the second – migrants, that moved there in the 70s to work at constructioning of the agricultural machinery plant, the third – migrants from the 30-km zone and new citizens, that came there because of the various matters. In general, it is necessary to notify that at present community in Borodyanka develops quite intensively – new traditions and norms of behaviour are created. Sometimes they are in conflict with the old ones.

- 488. There are several negative factors, connected with the Chernobyl catastrophe, that are influencing the population of Borodyanka. First the concern about living in the contaminated zone and it's impact on the people health, second the stress of the evacuees, that are obliged to adjust to a new environment that isn't always very friendly people, who were resettled to Borodyanka from more contaminated areas have similar problems. Third liquidators & their families have all these problems and beside this serious problems with health.
- 489. Except the problems that are connected with Chernobyl all the problems typical for today economic situation exist in Borodyanka.

In Borodyanka the centre is housed in the building that was constructed for the 'House of Culture ' and it was enough room for all the activities that are provided in the Centre.

In the same building the local library for children is located and it is planned that Centre will cooperate with it organising activities for children.

490. **Borodyanka Centre** is the largest one as for the number of personnel. The emphasis in the work with children is made on the development of social skills. Role games "family", "hospital", creative games and others are common practice there. A

lot of work is done to study family traditions and family history with children. Attention is paid to develop creativity in children, to familiarise them with nature.

491. As for the work with teenagers, it is necessary to mention the "School of survival", teenagers club "I+You", ecological lab. Teenagers-volunteers take part in the work of these clubs. The work in the "School of survival" is aimed on development of safe behaviour skills and first aid skills in cases of disasters and accidents. The rescue team received first award among the IS countries in the 1998's competition.

The work of the club "I+You" is aimed on the juvenile education in the issues of sex, hygiene, AIDS, drug and alcohol use and violence prevention. The club teaches the ways of an adequate communication with opposite sexes of the same age.

- 492. The ecological lab is the longest program of the centre. In this lab the teenagers are trained to measure the level of the radioactive contamination of the locality and in foods. They find out about environmental processes and peculiarities of the native region. Any inhabitant can get consulted on the problems of ecology. The teenagers members of this lab go on frequent tours around their region and Blast, print the magazine "Ecolog" containing the information about their researches, organise parties and meetings.
- 493. The work of the club "Made of the ball and scrap" is a good example of activity with adults. The club mainly consists of young mothers that have the opportunity to exchange clothes and toys for their children, to make and repair clothes.

It is also necessary to mention about the work with disabled and aged people. The clubs for this category of people are created in the centre. And meetings of these groups and groups of support are conducted by the centre.

494. Slavutych Centre

A city of 27,000 people, close to Chernobyl, about 2 1/2 hours away from Kiev and 40 km. from Chernobyl. The city was established in 1986, post Chernobyl as the nuclear plant town. All residents either work in the plant or in the service industries for the town. Most are evacuees from Prypiat or Chernobyl itself or new migrant workers for the plant.

The population: 26,000 people. It is a monoindustrial town with a well-developed infrastructure and highly qualified experts. The average age of the inhabitants is 26 years.

- 495. Slavutich community stands out as dynamic and highly active socially. On the other hand, the system of social norms and traditions is still being developed. This caused a lot of social and psychological problems. The major one is the absence of concrete perspectives, the necessity to master a new profession and change life style. The proximate closure of the plant brings up many questions.
- 496. The average salary in the city is much higher than the remainder of the country, especially for the direct employees of the plant and those service institutions which the plant has 'adopted'. This creates difficulties in income distribution. Overall the standard of living and life style is good with relatively spacious apartments and many individual houses. Schools, day-care centres and hospitals are all relatively

well equipped, well staffed and with high standards.

- 497. Now the city is facing new social and economic problems related to the closure of the Chernobyl power plant. Income of the settlers is decreasing dramatically because of the increase of unemployment and salaries that are going down. The number of suicides, alcohol and drug addiction is increasing. A lot of problems emerge among children and adolescents.
- 498. The distinctive characteristic of Slavutich centre's activity is a close cooperation with the town administration. Informational-analytical department of the centre accomplishes mass sociological interrogations on the regular basis to reveal most acute problems of the community and the public attitude to the innovations of the local authorities.
- 499. The work with children is among the priority areas of the centre's activity. The group work is conducted there game therapy, fairy-tale therapy, preparation for school, familiarisation with environment. The work as for correction of the parent-child relationships is especially worth mentioning. The group of parental effectiveness, where the parents learn to bring up their children correctly, to find the ways out of the difficult family situations, works in the centre for many years.
- 500. As for the work with teenagers, there are quite enough juvenile problems in Slavutich. First of all alcoholism and drug use. That is why the specialists of the centre gather discussion groups, conduct training, organise informative and mass events to prevent these kinds of problems.
- In connection with increased number of suicides and suicide attempts, especially among the teenagers, an evening time working "hot line" was implemented in the centre with the help of the town administration.
- 501. The grammar school was organised for young girls. The girls learn to serve the table, to take care of children, to ride horses, to dress up right, study literature, methods of self-defence, etiquette, etc. This form of work is rather popular in the town.
- 502. A great number of divorces are peculiar for Slavutich, so family problems become a priority for the experts of the centre. The basic area of activity in this field contains individual and family consulting, group training in developing marital habits. It is possible to state, that practically whole range of methods of social work and practical psychology is used in the centres individual and group consulting, group meetings, psycho-correction groups, groups of support, art therapy, training, role plays, mass events, etc.
- 503. **Ivankiv** is an urban village, a regional centre. It is necessary to stress that having an administration of its own the isolation zone administratively belongs to the Ivankiv region. A lot of Ivankiv citizens work in the 30-km zone in shifts. The number of the town population is close to 12,000 people. The town belongs to the "third zone" (voluntary settle-out zone).
- 504. Ivankiv community has been developed for many decades. It has a traditional patriarchal nature. Many residents run household in kind, reside in separate private

houses. In the latest years a tendency for decrease of the population due to the low birth rate and population exodus to another ecologically clean areas.

- 505. **Invankiv Centre** is different for its art & ethnography area of activity. Several arts profiled clubs for children and teenagers work there. Children and tutors study and develop luxuriant traditions of the local amateur artists. Children Puppet Theatre plays a special part. In this theatre children can play out various problems, complexes, difficult life situations. On the whole, art therapy is one of the priority areas of activity for the Ivankiv centre.
- 506. In the juvenile work a special attention is paid to the prevention of drug use, AIDS and sexual violence. This is all implemented in the group work of the club "I+You".

It is necessary to mention the huge scope of mass work with teenagers and adult inhabitants of the town.

- 507. The centre frequently conducts the meetings with administration of the town and region, devoted to the actual problems of the community. The centre actively participates in the program for children health improvement abroad (Spain, France). There is a club for mothers, whose children suffered from the Chernobyl disaster. Various competitions and creative parties take place. The club for pensioners, that practices group meetings, chess competitions, and parties works in the centre for several years.
- 508. Experience of the Centres for social and psychological rehabilitation makes it possible to formulate general principles of Centres' programs and activities. Working with different groups and institutions, Centres have an opportunity to influence the population promoting increase of their activity, coping with depression and taking responsibility for their own lives not waiting for charitable programs.
- 509. When working out the strategy of the Centres for social and psychological rehabilitation created within the framework of UNESCO Chernobyl Program special attention is paid to educational, ecological and humanitarian aspects and positive attitude towards life. Population is becoming aware of the problems always considered to have nothing common with everyday life. Intersection of public life with the problems of personal human evolution can become destructive when a person is not ready to take responsibility for himself, identify real values and senses.
- 510. Taking responsibility for ones own mental, somatic and micro-social well being, on the contrary, presupposes constructive position. It promotes solution of personal and global tasks of self-determination regarding threatening factors, which are in fact the results of anthropologic competence of previous generations or contemporaries.
- 511. Forming positive attitude towards both ones personal vital activity and vital activity of macro-communities is the main problem faced by population. This attitude is based on overcoming social and psychological stereotypes of irresponsibility, atrophy of moral and ethic components of "person nature person" relations.

All employees of the Centres (from day care workers to specialists) do their best to provide all possible support to population when solving the above-mentioned problem.

Prior to implementation of a new area or a new kind of activity the centres make a research of the problem's prevalence and it's actuality for the community. Frequently one or another group is formed due to the demands of the people. It is necessary to mention that several public organisations work on the basis of the centres. The emphasis is made on the numerous volunteers.

Five years of work of the community centres showed their extreme necessity for people. The centres react flexibly to the changing situation, influencing significantly the increase in social activity and people's sense of responsibility.

Centres Activities within the Framework of Project 64

- 513. The psychological effects of the Chernobyl catastrophe, anxiety, depression, psychosomatic disorders, resulted from different factors lack of public information, after the accident, stress and trauma of evacuation and relocation, breaking of social ties, fear of the consequences of radiation exposure for health. The distress caused by this misperception of radiation risks is long-lasting and extremely harmful to people
- 514. It was noted by experts in international Chernobyl conferences (WHO, 1995, EC/IAEA /WHO 1996), that there is a need to improve matters locally, to increase public knowledge of the health effects of radiation and radiation protection; and to foster trust in the personal ability to change one's life for the better.
- 515. The need of psychological assistance to be delivered to the affected population was the reason that one the major projects of the UNESCO-Chernobyl Programme was concerned with creation of the Centres for social and psychological rehabilitation for the population that suffered from Chernobyl Catastrophe. They are designed to provide psychological support, particularly group and individual counselling, to local residents, evacuees, and liquidators.
- 516. Other typical activities include children's playgroups, information seminars, cookery and craft classes, sports activities, art therapy and music. Significantly, the Centres were named "Centres of Trust" by the early workers themselves. Centres work along the concept of social work which bridges community psychology and clinical psychology; they do not function in the framework of one theoretical approach or one therapeutic technique.
- 517. The Centres are functioning in settlements, which are in various ways affected by the consequences of the Chernobyl catastrophe. Among the sites where the centres are located there are places that belong to the contaminated zone (levels of contamination allow to live there with some restrictions), villages for people who are resettled from the exclusion zone, villages where there exist two communities "locals' and the 'relocated', sites the life of which is still closely connected to the Chernobyl power station and the exclusion zone (for exemple

Slavutych where the power station still remains the main employer for the inhabitants) etc.

- 518. Given this, the Community Centres are facing the whole spectrum and scale of psychosocial problems caused by Chernobyl. These problems are seriously aggravated by social and economic consequences of the decay of the Soviet Union decrease of quality of life, raising of unemployment rate, dramatic change of the labour market structure, worsening of public health etc. In fact, it is extremely difficult to distinguish the psychological effects of the Chernobyl accident from effects of economic hardship and the dissolution of the USSR.
- 519. The Community centres were staffed by professionals who were trained for the purpose in psychological counselling, community psychology and social work and other related subjects. It is important to highlight that professionals of the UNESCO Community Centres were in fact the first to start community social work in the countries of former Soviet Union.
- 520. On the initial stages the Community Centres were supposed to have a comparatively limited goal of the activities carried out, that is, to provide psychological support to the people suffered from the Chernobyl catastrophe. It was planned that the Centres' staff psychologists and social workers would provide consultative support, both individual and groups, for the inhabitants of radiological contaminated territories and the resettled families.
- 521. Centres were supposed to deal with reduction of anxiety and fears regarding the negative influence of radiation on children's and adults' health, improve the adaptation of settlers to new living conditions, new social environment etc. Information activities were also planned being an important mean of anxiety reduction. These activities are aimed on increasing population awareness regarding radiological consequences of the catastrophe and measures that should be taken to ensure safe life on contaminated territory. Main attention was to be paid to children and families.
- 522. Thus the objective assign to the Centres were:
- to improve the mental health of all age and social groups in the community;
- to promote family cohesion and parenting skills;
- to encourage interactions within the community;
- to empower community members to take control over their lives;
- to develop social responsibility;
- to promote problem-solving.
- 523. The tasks and issues, UNESCO-Chernobyl Programme Centres of Social and Psychological rehabilitation are currently dealing with, are much more broad then coping with the consequences of Chernobyl catastrophe. Lately, the population of iNIS countries is constantly suffering from psychological crisis caused not only by Chernobyl effects, but by serious social and economic changes resulted in increase of unemployment, impoverishment of a great number of people, decrease of medical service quality etc.

- 524. Despite of the fact that Chernobyl catastrophe happened more than twelve years ago, it remains an actual source of negative feelings in the affected population, including feeling of helplessness and despair, and loss of hope for the future. Moreover, any emerging problems (health problems, ecological issues even it may sound changes of weather) are first of all linked in the minds of people to the consequences of the catastrophe.
- 525. Our survey conducted in March 1998 in the settlements where the UNESCO community Centres are located illustrates this fact. In Table 1 you can see, that all together more than 60% of adults and 50 % of schoolchildren answering the question "How are you personally or your family affected by the Chernobyl accident?" link the accident with the worsening of their health and quality of life.

Table 1
Consequences of the Chernobyl accident (%)

	Adults	Schoolchildren
We get sick more often	62,8	53,5
We lost everything at the time it happened	6,5	3,0
We always think of the accident and the radiation	34,0	27,4
The whole life has changed	14,6	9,9
Other	2,7	16,2

526. The survey data show what people feel and think about the consequences of the Chernobyl accident no matter if there are any objective evidence related to the radiological situation

Natural and technological and social crises and disasters are usually followed by deep psychological crises of individuals affected by them.

- 527. Thus Centres of Social and Psychological Rehabilitation created within the framework of the UNESCO-Chernobyl Programme found themselves in a situation when they had to resolve all kinds of psychological problems faced by the people on individual, group and community level. In the course of operating they transformed themselves in fact into Community Centres and the centres are working now with all age and social groups in the communities and also, with all problem and risk groups (Chernobyl liquidators and their families, adolescents, children-invalids and their families, single mothers, families of alcohol and drug addicts, etc).
- 528. It appeared that the most important factors of mental health improvement in a postcatastrophe period are renovation of social links been destroyed and communities restructuring. That is why Centres pay special attention to community work and community development, forming the mechanisms of interrelations among the community members and separate groups within it.
- 529. Goals and objectives that were set to the Centres by real life situation and the necessity to meet the needs of the affected population resulted in expansion of the

spheres of community life where the Centres are operating. In order to reduce stress and improve the effectiveness of countermeasures, it is essential also to change the population's beliefs and attitudes. The problem is more one of communication than of medication.

- 530. Main areas of the Community Centres' for Social and Psychological Rehabilitation activities are as following:
- Reduction of general tension and anxiety among population suffered from Chernobyl catastrophe (settlers, inhabitants of contaminated territories, liquidators, etc.);
- Providing psychological support to families and schools when working with children, correction of their behaviour;

 531. Professional orientation of youth under conditions of economic and labour market structure that have changed;

 Proving psychological support to socially unprotected groups of population and socalled problem and risk groups: liquidators, alcohol and drug edicts and their families, young mothers and pregnant women, invalids (especially Chernobyl invalids) and their families, pensioners, families with many children, lonely mothers, etc.);

 532. Working with community on developing links among separate groups and members of this community, developing the mechanisms of interrelations and mutual support within the community, creation NGOs;

 Psychological support and social work with unemployed that makes it possible to create within individuals, who lost their job, readiness for active search of a new job, including the change of occupation;

• 533. Formation of individuals' psychological readiness to participate in a small business and providing support when creating their own enterprises;

 Participation in a small business, creation of small enterprises can be considerable change of individual's psychology and display of capability for personal responsibility and initiative. Involving the people into business' development creates real conditions for more fast realisation of democratic transformations;

• 534. Hot lines aimed on working with the most acute individual crisis situations, prevention of suicides;

 Sociological and socio-psychological monitoring of situation in a community in order to be sensitive to the specific needs of the concrete community.

535. The program in all community centres has several aspects:

- a community led program for the entire community
- a specific programme for adults/ parents
- a specific programme for adolescents
- a specific programme for children
- a specific program for liquidators

536. COMMUNITY LED PROGRAMME

This aspect of the programme is mainly a source of information for the community as well as a forum to discuss and possibly change the community life. In general, however, lectures, seminars and debates, related to Chernobyl and other important for the community issues, are offered.. Information displays as well as art displays etc., entertainment and various activities are also an integral part of the programme. If the community chooses they may organise language classes, economics classes, and other lessons or literature evenings.

537. PROGRAMME FOR ADULTS

Information

Lectures, seminars, debates, public meetings etc. are organised on a needs basis and according to the desires of the community. These may involve information on the health consequences of Chernobyl, health questions in general, family planning, menopause, the legal rights of evacuees, liquidators or those living in a contaminated zone, human rights, legal rights, taxation, the economic situations, the changing laws of the country, setting up a small business, setting up an NGO, agricultural and farm issues, municipal concerns, meetings with the mayor and other government officials, etc.

Brochures and leaflets are prepared on various information, especially that which is Chernobyl related, in each centre.

538. Parenting skills training

Both small group and individual sessions are available for parents to discuss and learn effective parenting. The trained social workers are responsible for this part of the programme. Over time, culturally appropriate audio-visual materials will be prepared for this aspect of the programme.

539. Counselling

Both group and individual counselling are available by appointment for those adults who need or chose counselling. The social worker or invited specialist acts as the counsellor. When he/she diagnoses a need the client is referred for therapy to an appropriate professional.

540. Creative and other activities

Various activities or small discussion groups are available, either on a regular (once a week) or irregular basis. The goal of theses being to allow people to realise and express their emotions, to meet, to exchange ideas, to learn, to become acquainted with the other directions of the programme and to have the possibility to hold informal meetings and discussions with the specialists/social workers in the centre.

541. SUPPORT GROUPS

These are organised on a needs basis and consist of such groups as:

AA, Abused Women, Pensioners, Unemployed, Family Planning, Pregnant Families, Young Mothers, Single Parents, Information on the Health Consequences of Chernobyl, Nutrition, Radioactive Clean Products, Being Evacuated, Being a Liquidator, Feeling Incompetent, Impotency, etc.

542. Family days and weekends

A variety of evening, day and weekend family activities are organised, based on the

desires and needs of the community.

Entertainment

The Centre staff other services in the community and volunteers organises this.

543. PROGRAMME FOR ADOLESCENTS

Information

Lectures, seminars, debates, public meetings etc. are organised on a needs basis and according to the desires of the community. These may involve information on the health consequences of Chernobyl, family planning, sexual behaviour, human rights, children's rights, religion, moral issues, ethical issues, teenagers and the law, the economic situations, the changing laws of the country, setting up a small businesses, setting up an GO, agricultural and farm issues, municipal concerns, meetings with the mayor and other government officials, etc.

544. Brochures and leaflets are already being prepared on various information, especially that which is Chernobyl related, in each centre. More professional material will be prepared centrally in Phase two of the project.

545. Counselling

This direction is again similar to the counselling program available for adults, the specialist having received training in working with adolescents.

Support groups

These are organised on a needs basis and consist of such groups as: AA, Abused Children, Relationships and Sexual Behaviour, Family Planning, Preparing for Marriage, School Phobias, Adolescent Delinquency, Information on the Health Consequences of Chernobyl, Nutrition, Radioactive Clean Products, Being Evacuated, etc.

546. Creative and other activities

This direction is similar to the activities programme for adults.

Family holidays and entertainment

A variety of evening, day and weekend family activities are organised, based on the desires and needs of the community.

547. PROGRAMME FOR CHILDREN

Play room

The play centre is equipped with educational materials for children of ages 2-12. The centre is operated according to an open plan, self-directive educational philosophy. Children are assigned to groups according to a wide age range or specific 'therapeutic' needs, and then assigned to time slots of one and a half hours each, a number of times per week (depending on needs, space and time availability)

548. Pre-school, Kindergarten and School classes attend also, with their teacher. The centre is programmed for developmental, educational or therapeutic use. It is also available for teachers as a model of open plan, non-directive education as well as a base for lectures, seminars etc.

549. Counselling

Both small group and individual counselling is available for the children who are in need of counselling. The specialist, who was trained in child counselling techniques is also available in the play centre for informal play therapy with children attending the centre.

550. Family events and entertainment

A variety of evening, day and weekend family activities are organised, based on the desires and needs of the community.

CAFE

Each centre is equipped with a cafe, as an integral part of the programme, where informal meetings and discussions and other events can be held.

- During more than four years of their operation, Centres proved to be a necessary and efficient institution both for the population of the settlements and the local administration. They are visited by various groups of the population for different activities and the number of visits is constantly increasing. This fact is well illustrated by the following two tables.
- 552. Table 2 contains figures obtained in course of the survey conducted in all ten settlements where the centres are operating which show that most of the people that visit the centre at least once actually become their permanent clients and some of them turn into volunteers in their communities. People are interested in the activities of the centres of the Centres, that involve the majority of the population.

Frequency of visits (%)
Table 2

	1.	o regularly f t e	seldom	once
Adults	25,3	44,6	26,8	3,3
Schoolchildren	32,2	25,9	36,0	5,9
Administrators	21,7	54,4	23,9	0

553. For 1/5 of the population Centres appear to be the only place where people can receive assistance and support in solving personal problems they are facing in everyday life.

An extremely important issue is that local administration started to use Community Centres as mediators in the interaction between them and the population.

554. **Community Centre in Borodyanka** (Ukraine) may be a good example of efficient operation. Total population of Borodyanka is 14000. It is a site which is located in a territory with comparatively low level of contamination. So some people were relocated to Borodyanka from places that have higher level of contamination.

Since its opening the Centre has accepted 28315 visitors, including 13186 children, 9621 adolescents, 5508 adults. The number of Centres' visitors is constantly increasing. During the first half of 1996 - 8107 persons visited the Centre in Borodyanka while in the same period of 1997 this figure increased to 9878.

555. Numbers of visitors in the Russian Community Centres per year are given in Table 3.

Number of Visits UNESCO-Chernobyl Centres Russia, 1997 Table 3

	Bolhov	Nickolskaya Sloboda	Uzlovaya
Population	13000	3580	10000
Number of visits			
Total	6632	15392	10383
Children	3077	5868	4221
Adolescents	2615	2752	2976
Adults	940	6772	3186

- 556. A separate issue is **Slavutych**, satellite town of the Chernobyl power plant which faces various social and psychosocial problems caused by closing of the Chernobyl plant. Realisation of the comprehensive programme aimed at mitigating of these problems is now a logical continuation of the initial objectives of the UNESCO-Chernobyl Programme. Among the problems already emerged are the following: increase of general tension among the population, demonstrations, start of migration among the inhabitants of Slavutych, increase of alcoholism, suicides and suicide's attempts, etc. All these problems being primarily psychological result in a negative impact of the power plant safety.
- 557. Community Centre in Slavutych using all the UNESCO-Chernobyl Programme Centres developed several programmes of Slavutych revival under new social and economic conditions. This programmes include mental health care of population as one of the most important issues.
- 558. Analyses of content and areas of Centres' activities shows that these institutions have accumulated unique professional and organisational experience of work in a postcatastrophe period and also in a situation of social and economic crisis.
- 559. Although Centres' staff continually redefine the range of activities, they propose according to the needs and demands of the specific communities in which they are located, their actions come under four broad categories:
- casework, with a focus on individual and family therapy;
- group therapy with problem and at-risk groups;
- play therapy for children;

- empowerment and capacity-building at community level with the creation of local organisations, neighbourhood groups and associations.
- 560. Currently, while delivering their specific functions, Centres have successfully integrated into general system of national and local social institutions.

The Centres have become a part of the social and cultural infrastructure and have a significant impact on the community life. People interviewed are highly satisfied with the Centres' activities and interested in their future development. At the same time the Centres provide a significant p part of the population with cultural and leisure services.

- 561. These activities make an important part of the people's life. Individual support and work in groups are more widely helping people to find solutions to their personal problems. Help is provided not only to those who suffered from the Chernobyl accident, but to the whole population.
- 562. In the perspectives of different administration and government levels and the majority of the population, consider the following areas of Centres operation to be most important in future:
- social work orientated towards providing help to the least protected groups of people;
- psychological counselling sessions and prevention measures;
- social and psychological help provided to different categories of people effected by the Chernobyl accident;
- cultural and leisure activities.
- 563. The Community centres we are speaking about have created and tested the model of social work in a postcatastrophe period under conditions of social and economic system's destruction. This model of social services which that is based on development community action and empowerment of individual initiative may be applied to different crisis situations in communities, especially in the countries of the former USSR. Based on this model it is also possible to develop social services and foster democratic developments in these countries.
- 564. For example the experience of creating the Community Centres was used in Crimea, in the places of resettling the Crimean tatars. Professionals of UNESCO-Chernobyl Programme Centres from Ukraine and Belarus, delivered trainings for social workers of newly created similar centres for resettled tatars. Another example: social workers and psychologists working in the UNESCO Centres are delivering the trainings for so-called practical psychologists (consultants) and employees of social services in Ukraine, Belarus and Russia.
- 565. As far Community Centres for Social and Psychological rehabilitation proved to be an example of providing socio-psychological support under complicated ecological and social conditions, it would be expedient to develop the network of similar institutions not only in the regions suffered from Chernobyl Catastrophe, but in the ones with the most complicated social and economic conditions (greatest decline of industry, high level of unemployment, presence of refugees and migrants, etc.) as well.

- 566. Such Centres can also promote further democratic transformations in the countries, for the Programme already has the experience of developing social responsibility the most important factor when coping with the consequences of any crisis. Besides, it is the lack of readiness to social changes as well as being socially responsible and making decisions that is considered to be the main factor impending the democratic development in post-totalitarian states.
- 567. Main axes of the Community Centres' for Social and Psychological Rehabilitation activities are as following:
- Reduction of general tension and anxiety among population suffered from Chernobyl catastrophe (settlers, inhabitants of contaminated territories, liquidators, etc.):
- Providing psychological support to families and schools when working with children, correction of their behaviour;

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- 568. Professional orientation of youth under conditions of economic and labour market structure that have changed;
- Proving psychological support to socially unprotected groups of population and so-called problem and risk groups: liquidators, alcohol and drug edicts and their families, young mothers and pregnant women, invalids (especially Chernobyl invalids) and their families, pensioners, families with many children, lonely mothers, etc.);

•

- 569. Working with community on developing links among separate groups and members of this community, developing the mechanisms of interrelations and mutual support within the community, creation NGOs:
- Psychological support and social work with unemployed that makes it possible to create within individuals, who lost their job, readiness for active search of a new job, including the change of occupation;

•

- 570. Formation of individuals' psychological readiness to participate in a small business and providing support when creating their own enterprises;
- Participation in a small business, creation of small enterprises can be considerable change of individual's psychology and display of capability for personal responsibility and initiative. Involving the people into business' development creates real conditions for more fast realisation of democratic transformations;

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- 571. Hot lines aimed on working with the most acute individual crisis situations, prevention of suicides;
- Sociological and socio-psychological monitoring of situation in a community in order to be sensitive to the specific needs of the concrete community.

Project Organisational Structure

572. In the end of 1992 UNESCO opened an office in Kiev to work in three countries on implementation of this and other projects of UNESCO-Chernobyl Programme.

Project 64 - The UNESCO CHERNOBYL Community Development Centres had the following management structure:

Kiev Office for Project implementation and co-ordination: Project Co-ordinator, assistant-accountant, secretary, driver.

573. National Co-ordinators (Russian, Belorussian, Ukrainian) - state administrative support to the Project.

National Supervisors (Russian, Belorussian, Ukrainian) - professional support to the Project in each of the countries.

Managers of the Centres for psycho-social rehabilitation, providing the Centres management on sites.

- 574. As a rule, each Centre has a staff of 15 to 25 people, which consists of a manager, psychologists, social workers, sociologists, day-care workers and activities organisers and others.
- 575. The co-ordination office carried out following functions:
- management, co-ordination and control of the whole Project functioning;
- organising and preparation of training sessions for the staff of Community Centres:
- analysis and summarising of the Project activities;
- 576. Management and Co-ordination
- 1. Conducting all necessary co-operation with national partners (Ministry of Emergencies, regional administrations, etc.) for providing the Project functioning.
- 2. Control over the Project functioning on all levels visiting of the Centres, meetings with national co-ordinators, supervisors, Centres staff, representatives of all the organisations, involved in the Project local administrations, social services for families and youth, medical institutions, militia, cultural and educational institutions.
- 3. Preparing of programmes and training plans for education and professional qualification improving of the Managers and Centres staff, and training programmes' realisation. Based on information, provided by Supervisors and Managers, annual training programmes for psychologists, social workers and other specialists of the centres were created.
- 577. Training programmes were realised by international and national leading specialists.

University Catholique de l'Ouest in France and University of Utrecht in Netherlands participated in caring out of the training programme.

Project office organised and co-ordinated Centres staff training on sites by means of psychologists and social workers exchange among the Centres.

578. Trainings are being organised on the basis of the Centres, in fact in 9 Centres (except Gagaryn yet) the psychological work with personnel was already hold. It was aimed on forming an effectively functioning team and on strategy development for the Centre integration in their community.

- 4. Systematic (once each quarter) meeting of the Managers, sometimes including training. As the result of these meetings, a strategic analysis of situation in the Centres has been made, the most actual problems are being determined, new programme directions in the Centres activities are being discussed and a necessary assistance to Managers in these problems resolving is being provided.
- 5. Employing, interviewing new Centres specialists together with Supervisors (sometimes with Nat. Co-ordinators).
- 6. Carrying out control of using the funds, received from UNESCO on the contract basis. Each Centre (in the person of Manager) has the direct contract with UNESCO, according to which Manager quarterly receives a certain sum. As it stated in contract, the sum is being divided into two parts and spent on the current needs of the Centre and staff bonuses awarding.
- 578. Every quarter Centres submit the financial and activities reports to the Kiev Office. These reports are being analysed and then sent to UNESCO Paris. Accountant of the Kiev Office controls Centres expenses correspondence with the contract terms.
- 7. Project office also carries out responsibilities of supplying equipment to the Centres and renewing of the equipment. The Centre in Gagaryn is not completely equipped yet.
- 8. Project office controlled as well the construction works in those Centres, where they have been held.
- 579. Except the activities mentioned, other additional UNESCO Projects were coordinated and carried out by the Kiev Office. They were related to medical equipment supplying, foreign languages trainings, joint Project together with "Musique Esperance" Organisation.

Project role during the delivering of psychologist and social workers training

- 580. Analysis and Summary of the Centres Activities Experience
- 1. Sociological poll was made in the places, where the Centres are located, structuring and analysing of data is being carried out. The result of the poll will allow to determine the level of the Centres activities efficiency, and to correct information on needs of the certain community and developmental strategy of further sustainable development of the Centre.
- 2. Project office conducts analysis of the Centres activities in community, and, together with National Co-ordinators and Supervisors, realises summarising and spreading of this experience. Together with the Angers Catholic University (France) the joint magazine Cahiers de l'IPSA "UNESCO Community Centres for Psychosocial Rehabilitation. Chernobyl 10 years later" was issued (1996). It contained materials on the UNESCO-Chernobyl Centres.
- 581. Ministry of Emergencies of Ukraine issued a book "Social and Psychological help to population, suffered after the technogenic catastrophes (based on the

Chernobyl catastrophe materials, 1997), which was completely based on the UNESCO-Chernobyl Programme materials.

- 582. In June 1998 the WHO conference "Long-term consequences of the Chernobyl Catastrophe" took place. The UNESCO-Chernobyl Programme (psychosocial Centres) had its own session there. 17 presentation by the Centres professionals together with Project Co-ordinator and Supervisors were maid at the Conference and published in the materials of the Conference.
- 583. Project office promoted the best possible way a spreading of the experience received. Work on publication the materials, which reflect the Project functioning in general and its particular directions in different periodical editions, Centres specialists participation in scientific conferences (travel organisational expenses are paid from the UNESCO funds). An active work is being carried out with mass-media on popularisation of the psycho-social Centres idea (TV programmes, talk-show, publications in press). Several publications under the mutual name "UNESCO Centres in the life of community" were published.
- As far as the unique for the former USSR experience was collected by the UNESCO Centres in the sphere of social and psychological support to population under the conditions of ecological and social-economic crises, demand for Centres specialists was form in other organisations of such kind: Crimea Integration and Development Programme had held two trainings for the social workers of the similar Centres in Crimea with the help of the UNESCO Centres professionals. These trainings were co-ordinated and controlled by the Kiev Office.
- 585. An agreement was signed between the Kiev Office of the International Organisation for Migration and Kiev UNESCO-Chernobyl Office regarding providing of the consulting assistance from the side of the UNESCO-Chernobyl specialists in creation the Centres for migrants acceptance in Kiev (was opened March 25, 1998). This agreement also foresee further training of specialists working with migrants by UNESCO-Chernobyl Programme specialists.
- 586. An agreement is concluded with Children sanatorium "Smena" (Crimea), in which the department was opened for work with children, affected by different catastrophes, for providing them with consultations and methodological assistance in work with these children.
- 587. Project Co-ordinator and two social workers (from Borodyanka and Aksakovschyna) visited Yevpatoria for work with the personnel of sanatorium and with children, staying there after the hurricane which happened in Belarus and Ukraine). The programme was developed or further co-operation with sanatorium in the sphere of the staff training for work with suffered people.

588. Centres staff training

In May 1998 the Conference was held for the all Centres specialists, which was aimed on the exchange of experience and forming new approaches in the Centres functioning.

589. Except this, the specialised training were held for specialists and representatives of Slavutych local administration for work with population under the conditions of The Chernobyl Power Plant being closed and changes in the structure of manufacture and labour market. The training was financed through the UN Department for Humanitarian Affairs in Geneva.

Series of trainings were held, directed onto the forming of Centres sustainability and staff professional level rising. Separate attention is planned to pay to the new staff members of the newly created Centre in Gagaryn.

590. As an example the following training programme could be presented. Training Programme for Managers and Professionals of the UNESCO Centres for Psycho-social Rehabilitation (1998)

Conference "UNESCO Psycho-social Centres - their influence on changes within community". May 25 through 28, 1998

Objectives - experience exchange between Centres, projects development.

Number of participants - 90 people

- 1. Business game "Co-operation between Centres and administrative structures on different levels"

 June September, 1998
- 591. Objectives forming the mechanisms of efficient co-operation between the Centres and administration, and their integration in the community.

The game is being held in two phases.

First - forming effective mechanisms for co-operation between managers and Centres specialists and administration (3 days);

Second - analysis of the effectiveness of introduction the skills received during the business game on sites (2 days).

Number of participants - 40 people (Centres Managers, their deputies, representatives of Ministries and administrations).

592. Seminar "Search of the additional sources of financing as a way of Centres sustainability providing". June 1998

Objectives - to form the constructive approach of managers and professionals to the search of additional financial sources and supplying them with necessary skills:

- creating mechanisms of learning the demands for Centres services in the community;
- teaching how to hold focus-groups;
- creating of economic activities in the Centres (economic and legal aspects);
- search of governmental and non-governmental organisations, able to provide financial support to the Centres;
- teaching how to write project proposals for grant receiving.
 Number of participants 30 people (Manager and 2 specialists from each Centre)
- 593. Training-seminar "Effective co-operation between psychologist and day-care worker (activities organiser) within the Centres functioning". September 1998

Objectives - development of the effective co-operation of psychologists and activities organisers in their work with children and their parents, with socially non adapted adolescents.

Number of participants - 35 people (3 specialists from each Centre and 8 specialists from Gagaryn Centre).

594. Training-seminar "System of organisation of social and psychological work for unemployed in the monoindustrial city" (Slavutych). October - November 1998 Objectives - teaching administration representatives specifics of providing social and psychological help to people, who have lost their jobs.

Number of participants - 30 people (Slavutych administration representatives, Centres professionals, other Centres representatives).

595. Teaching the staff members of Gagaryn Centre on-site in another UNESCO-Chernobyl Centres. May - December 1998

Objectives - receiving the practical skills of social work by the Gagaryn Centre specialists.

Number of participants - 10 people.

Centres Impact upon Community Development

596. Community in Crisis: changes in lifestyles

The Chernobyl disaster has become the first link in the long chain of catastrophes and crises which swept over our society. Environmental, economic, managerial and social critical factors have been overlapping to result in a unique situation of polymodal life crisis. A crisis like that covers virtually every social stratum and every sphere of human life. The emergence and the development of crises in communities entails considerable increase in the quantity and quality of risks for large social groups and for every individual.

- 597. In human minds a crisis is associated with the collapse of an established social norms system, with the impossibility to go on with their usual life style, with their failure to comprehend the meaning of current developments, with their subjective non-acceptance of these developments and with lack of visible prospects for the future. The major psychological factor increasing the risk level in the lives of individuals and groups for communities in crisis is the lack of regulations (norms) determining the life activities modes.
- 598. The social crisis as a whole manifests itself in lack of regulations for individual integration into community and in lack of social norms regulating behaviour and activities. With respect to this indicator Ukraine's existence as a sovereign state can be defined as ongoing social crisis. Lack of norms and regulations governing individual integration into community has the following consequences: on the one hand, society represented by the state stops performing its basic functions with respect to individuals, the protective function in particular.

³ S. Yakovenko's term

599. On the other hand, individuals and isolated groups start perceiving the state as an additional source of risks and social threats. Individuals get alienated from society and from the state.

Parallel to general socio-economic crisis local risk factors start operating in certain communities, including those caused by Chernobyl disaster aftermath. This results in the emergence of crisis communities characterised by unique combination of extreme factors in human life activities.

- 600. Local community crisis manifests itself in the collapse of established life style. Crises like that can be caused by a variety of reasons from natural calamities to individual human actions important for the community as a whole. In any case crises preclude the reproduction of customary economic and life activities.
- Ukrainian and international psychological research has demonstrated that orientation towards restoring established life style provides the pivotal psychological component in positive strategies for controlling disasters' aftermath. Crisis controlling rate is in direct proportion to time period needed for such restoration.
- 601. The study of Chernobyl consequences has shown that even under long-term radiation impact the crisis control in local communities tends to rely heavily upon reinstitution habitual life styles. In this case radiophysical risk factors tend to be neglected people start living as if nothing had happened. Though objectively the risk factor may be still in place, it is simply displaced in human minds where it lingers as a fact known but taken no heed of in their life activities.
- 602. The crises caused by administrative and political decisions or government actions. Thus, the evacuation zone was identified following the Chernobyl disaster, and its residents have been resettled in other, less affected areas. The restoration of the former life style has become impossible for the resettlers, and the necessity arose to develop radically different life models. It is this necessity that proved to become the major risk factor for middle-aged and senior individuals.
- 603. The situation was further aggravated by the fact that resettlers had to do with indigenous population of resettling areas, their habits, traditions, life regulations, etc. All the resettlement areas became confrontation sites for two social groups representing different cultural traditions, social norms and psychological orientations. The confrontation gave rise to another local community crisis. There is evidence that even upon 10 years its aftermath has not been fully overcome yet.
- 604. The intolerance rate in interpersonal and intergroup relations is on the increase with general tolerance rate falling down. This process is accompanies with considerable rise in negative developments in virtually every sphere of community life. Crime rate is soaring up, especially, involving crime in everyday life, among adolescents and unmotivated crimes. Alcohol and drug addiction rates grow, among young people in particular. The same tendency is true of divorce rates and the numbers of abandoned children. Prostitution and homosexuality gain in scope.
- 605. All these and many other negative social phenomena attend the crisis and, in their turn, are conducive to crisis perpetuation and expansion. To control them it is necessary to curb the crisis itself successfully. Besides, the crisis engenders a number of negative psychological consequences. They include various emotional

disorders, reality perception disorders, as well as disintegration of psychological mechanisms regulating human activities. Mechanisms involved in setting life objectives and developing long-term life plans are the first to be affected.

- 606. The study of socio-psychological mechanisms for crisis control in local communities have revealed two optimal behavioural strategies. The first deals with human efforts aimed at restoring their former life model. This strategy is efficient enough in crises caused by short-term extreme factors fires, inundation's, explosions, etc. The second involves developing new group behavioural norms and models fit for new living conditions.
- 607. This appears to be the only efficient strategy when the crisis was caused by a variety of extreme factors preventing the restoration of former life style. It can be argued, on the whole, that the crisis would last for exactly the same period as is necessary for developing and establishing behavioural strategies meeting new conditions.
- 608. Crisis control in community will depend directly upon its scope and upon changes in life style that have occurred. The past decade has also shown that different communities have different levels of psychological resistance to extreme factors. The same effect can be perceived either as something normal and quotidian, or as a disaster ruining the whole life system. Regrettably, the psychological resistance phenomenon has not been sufficiently researched so far. It can be only assumed at present that it is based on psychological flexibility, high individual adaptivity and the ability to quickly develop new behavioural models.
- 609. Crisis give rise to risks covering all major human activities spheres and breaking links between them both vertically -i.e., individual-society, and horizontally -in interpersonal relations. It can be argued, then, that the emerging risks are not occasional, but systemic and comprehensive products of crises development. Consequently, the risks can be analysed and their psychological models can be plotted only on the grounds of an extensive crisis model as a socio-psychological phenomenon.

610. Social Processes Transformation

Using this model as a basis we have conducted research within the project framework in nine cities and villages in Ukraine, Belarus and Russia affected by the Chernobyl disaster. Our findings showed that the crisis has affected and changed the life of virtually every individual. According to conventional 10 point scale, the extent of crisis adverse impact upon community life was evaluated on the average as amounting to 8-9 points. The extent of affecting individual lives was somewhat lower - the average of 4-5 points. Moreover, in some cases the crisis promoted changes for the better.

611. These data testify to the fact that individuals can better adapt to the crisis then the community as a whole.

What it also means is that two opposite processes are under way in the community: ongoing life quality deterioration in communities, on the one hand, and individual life quality improvement, on the other hand.

social life. They can no longer perform the regulation and evaluation functions for human social behaviour. A "gap" appeared in mass mentality when people applying the same criteria to evaluate themselves and other people would nevertheless end up with different results.

- 616. The so called "anti-values" expressed as fears have emerged and became widely spread. Various fears arisen in the course of the crisis regulate human behaviour through the same mechanism as the values, not being them, this results in the following large-scale developments: social desadaptation; individual's alienation from society and state; social apathy; social parasitism; subjective and objective deterioration in life quality.
- 617. The most common fears are as follows:
- a) fear of poverty;
- b) fear of losing one's job;
- c) fear of losing one's moral values and ideals;
- d) fear of the future. It manifests itself both in the fear of one's own future, and in fears related to the future of close relations. Of special significance here is the fear caused by the indeterminacy of social situation;
- e) feat of loneliness. Lately it has become common not only for old people, but for young people as well. For these latter it is mainly related to the fear of losing close relations who are the young person's only source of moral, and, not infrequently, financial support.
- 618. The research findings have shown that the crises really effect changes in population life styles related to decrease in positive life styles share, and spread of negative life styles. Socio-psychological protection, responsibility and freedom rates go down, while the sense of compulsion gains in scope. The obtained data prove the possibility to control crises in local communities through designing and establishing human behavioural models and strategies meeting new conditions.

619. Centres' Performance Efficiency Indicators

The need to operate the Centres under complicated and shifting social conditions brought about the understanding of the fact that the Centres will operate efficiently only if they become an integral part of communities' social infrastructures. Therefore, the Centres' performance efficiency should not be evaluated so much by formal quantitative indicators, but rather by their impact upon communities' life styles.

620. In 1998 the sociological survey was carried out among the population that lives

in the places where UNESCO Centres are located. The total number of people interviewed in the course of the survey is 1194 including 464 adults. There were 42,8% men and 57,2% women.

621. With regard to the age of people interviewed they were:

- 21,2% young people aged 16-25 years old.
- 47,3% people in the age of 26-45.
- 20,8% people aged 46-60, and
- 10,8% who are more than 60 years old.

- 622. In relation to the educational level of the people interviewed the situation is as follows: Uncompleted Secondary Education 8,6%, Secondary Education-19,1%, Vocational Technical Education 37,9%, Uncompleted Higher Education 7,2%, Higher Education 27,2%.
- 81,3% of people interviewed have a family and 18,7% of them are single.
- With regard to the migration factor there were different groups of people interviewed: 78,9% who permanently live in that area: 12,3% who had to move to that area, 7,9% who moved to the area by their own wish: 0,9% refugees 683 schoolchildren aged 10-17 took part in the survey as well. There were also 47 people interviewed who are either government representatives of different levels or heads of various organisations.
- 624. Goals and objectives of the survey were as following:
- to define the effectiveness of the Centres' work in general terms through analysing the impact the Centres have on the community life and changes caused by their work.
- To define the extent to which the population is involved in the work of the Centres;
- To define the attitude of the population towards the Centres' activities;
- To identify social and demographic groups among the population who are involved in the Centres' activities;
- To define the needs of the population for different kinds of social and psychological work.
- People are well informed about the existence of the Centres. In addition, many people are personally involved in the Centres' activities. 83,2°/o adults and 69,6% schoolchildren who know about Centres visited them. As for the administrative officials this figure is 97,8%. These results prove the following things:
- Centres work with the majority of the population;
- People are interested in the Centres' activities. This is also proved by the frequency of visits.
- Most of the people who visited the Centres once actually become their permanent clients who are in need of the services provided by the Centres. The Centre is the single place for 1/5 of the population where they can solve their personal problems they face in life.
- 627. It is possible to some extent to define how efficient the Centres are in providing social and psychological help using the data available. Thus, 69,2% of adults interviewed said that they asked the staff of the Centres to help them. However, the way people approached the Centre and the requests they made were not investigated.

Out of these people 77% say that the Centre really helped them. Another 29% say that they still receive help. The following fact is also an important indicator: administrative officials address the Centres as well to find help in solving their personal problems they face in life (43,5%). All these people say that the Centre really helped them in finding solutions to their problems.

628. The most important indicator is the emotional attitude of the population to the Centres' activities.

When people were asked to what extent they were satisfied with the Centres' work the following answers were given:

- totally satisfied 42,3%';
- satisfied 50.4%;
- not quite satisfied and not satisfied -rest
- 629. When people were asked if they liked or disliked visiting the Centre the following answers were received:
- "I like it very much" -38,7%;
- "I like it" 60,1%;

The results of the survey show that the visitors are satisfied with the Centres' work to a great extent. It should be also noted that people are highly aware of ways the Centres work with their visitors.

- 630. When people were asked the direct question: "Do you like to stay in the Centre?" the following answers were given:
- "I like it very much" 53,8%;
- "I like it" 40,6%;

There is another good indicator. When schoolchildren were asked if anybody from their friends or relatives visits the Centre, 65% of them gave a positive answer. 15,7% of them had no idea about that. And 19,1% of them gave a negative answer. In addition, 56% of schoolchildren asked believe that their friends like to go to the Centre. And only 1,5% of them consider it to be not interesting for the others to visit the Centre.

- 631. When schoolchildren were asked the question: "Would you like to work in the Centre in future" the following answers were received:
- yes-30,1%;
- may be 40,9%;
- no 29%.

It is a good indicator when children have such a wish. It shows how attractive the Centres are. And it is extremely important because it gives the Centres a potential opportunity to influence the community life to larger extent in 5-10 years.

- 632. The following two questions show what people think about the consequences of the Chernobyl accident and the current situation in general.
- 84% adults and 62,7% children believe that they still suffer from the consequences of the Chernobyl accident no matter if there are any objective evidences of this or not. We can say that at the moment people's personal feelings are more important for them than any objective evidences related to the radiological situation.
- 633. Most of the administrators (90%) visit the Centres because they need to settle different business matters. They say that the Centres work with their organisations and undertake different initiatives on a constant (57,5%) or on a periodic basis (36,2%). It should be emphasised that administrators consider the Centres to initiate nearly 50% of such joint ventures. The programs for the events were jointly designed in 50% of the cases. It is only 12,8% when it was not the Centre but another organisation that initiated this or that event.

634. This is a good evidence of active co-operation between the Centres and the authorities together with the organisations that form the infrastructure of the community life. It is already now possible to say that the Centres work not only with the population but with other organisations as well. And this enables them to influence the whole life of the community.

These general assessments are proved by administrators' plans for farther interaction. 44,7% of administrators do not plan to introduce any changes into the nature and ways of their co-operation with the Centres. Another important aspect of this interaction is how administrators evaluate the efficiency of the Centres' work. In this regard the administrators actually form a specific expert group.

636. Evaluation of the Centres' Work Efficiency (%)

	Group	Efficiency evaluation			Nothing is being done	Difficult to answer	
		verv	low	average	high		
1	Pre-school children	2.2	0	44.4	42.2	0	11.1
2	Junior schoolchildren	0	0	3.3	55.6	0	11.1
^ 3	Teenagers	0	8.5	36.2	48.9	0	6.4
4	The vouth	0	20.5	40.9	25.0	0	13.6
5	Adults	0	9.5	40.5	40.5	0	9.5
6	Elderly people	2.4	9.8	31.7	39.0	0	17.1
7	The sick	0	16.2	40.5	13.5	2.7	27.0
8	Disable people	5.3	10.5	26.3	31.6	0	26.3
9	People effected by		4.7	27.9	39.5	0	25.6
10	Resettled people	2.8	2.8	27.8	33.3	0	33.3
11	Families (different	4.7	9.3	37.2	30.2	0	18.6
12	People with delinguent behaviour	2.8	13.9	38.9	19.4	0	25.0
13	Other	16.7	0	Λ Λ "*	33.3	0	16.7

- 637. The data available show that administrators' priorities are the following:
- 1. Social work with children and teenagers as well as measures to prevent drug abuse, AIDS and alcohol abuse. Those two are actually closely connected with each other for teenagers are a main group of risk.
- 2. Providing help to the sick, the disabled and those who are alone.
- 3. Leisure activities and social research.
- 638. The administrators were asked the direct question: "Do you think the Centre caused any changes into the life of your town or village?" The answers are given in the Table beneath.

Evaluation of the impact the Centres have on the community life (%)

The extent of influence	Administrators	Adults	
strong influence	60,9	27,2	
average influence	32,6	57,5	
slight influence	6,5	9,4	
no influence	0	5,9	

639. This actually shows that 90% of people asked accept the fact that the Centres influence the community life. If compared with the population the administrators evaluate this influence higher. But this difference is explained by the fact that administrators are better in understanding the general processes of social changes. This proves that the Centres have become an integrated and necessary part of the social life. It is likely to be the best evaluation of the efficiency of the Centres' work in the course of three years.

.640. Conclusions

- 1. While evaluating the efficiency of the Centres' work we should take into account opinions of the people related to the Centres' activities. These are:
- the population who are the customers of the services provided by the Centres;
- clients being provided with social and psychological help both individually and in groups;
- representatives of the authorities and different organisations related to the Centres' activities.

641. The results of the survey show that

- significant part of the population is well informed about the Centres' work and involved in their activities. There are permanent clients of cultural and social services as well as those who are helped by social workers and psychologists.
- Centres have become a part of the social and cultural infrastructure and have a significant impact on the community life. People interviewed are highly satisfied with the Centres' activities and interested in their further development. The Centres provide a sufficient part of the population with cultural and leisure services. These activities make an important part of the people's life.
- 642. Individual support and work in groups are more widely exercised while helping people to find solutions to their personal problems.
- population and the administrators more and more often accept the need of social and psychological help.
- Centres are fully integrated into the whole infrastructure of villages and towns in the form of the institution that provides social and psychological help not only to those who suffered from the Chernobyl accident but to the whole population.
- 643. Representatives of different government levels and the majority of the population consider the following directions of work to be the most perspective;

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- social work orientated towards providing help to the least socially protected groups of people,
- It is necessary to further develop those directions of the Centres' activities related to the professional work and orientated towards the development of children and the adaptation of the least protected groups of people.

PART 4 - Social and psychological work under conditions of catastrophes

Belarussian Analysis

644. The overcoming of negative consequences of accidents should include a complex of measures of social, economic, medical, psychological and pedagogical character directed to updating or improving standard of living.

With the purposes of the government support in Belarus the Law "On protection of the population and territories from extreme situations of natural and man-caused character", the law "On social protection of the invalids in Republic Belarus", the decree "On the approving of a model rule about the territorial centre of social service for family and children " and others are accepted by Chamber of the Representatives and approved by Council of Republic.

- 645. On the example of last decision it is possible to show, that the acceptance of decisions, realisation and control of measures and programs on stabilisation of social psychological situation is carried out at a state level. The territorial centre of social service for family and children is official body of social protection of the population of a city, a region. It created for families and children, who require for social support, which realised by rendering duly and qualified psychological, legal, economic and other social help.
- 646. The centre renders social services for families and citizens in case of poverty, orphanage, physical inability, family trouble, return from prison, crisis situation, emergencies and other cases, when the social support is necessary.
- 647. The structural departments of the centre:
- 1. Department of primary reception: to reveal and account the citizens requiring for social services, to inform about services, to carry on a receipt of the citizens and direct them to the appropriate functional departments of the centre, to give the information about tasks and contents of the social help, rendered by the centre, to propagandise the services, given by the centre, to describe in local mass media about questions on problems of family, to issue of the leaflets, bulletins etc.
- 2. Department of the medical and social help.
- 3. Department of the psychological and pedagogical help.
- 4. Department of the social rehabilitation of children and teenagers.
- 5. Department of the social and economic help.
- 648. The centre gives social services on a free and paid basis. The money resources are enlisted to account of the centre and directed to its own development and improvement of the social service.

All state pedagogical universities prepare the psychologists. The rate of the psychologist is included in typical staffs of special and higher educational institutions. About 2000 psychologists works in Belarus. The centres of social - psychological rehabilitation of the population with "telephones of trust" and the centres of social - psychological rehabilitation of the population, affected by explosion on Chernobyl NPP are organised.

649. As a result of the Chernobyl catastrophe the conditions of life, labour, and character of psychological and moral conditions are change.

The psychological support is necessary at all stages of emergencies and during the population' and salvers' training for actions in extreme situations. The most difficult social - psychological aspect is the transition to the development stage of post-crisis condition. Any post-crisis conditions depend on a situation, surrounding and victims.

- 650. The psychological reaction of the persons who was in a zone of accident depends on experiences, a degree of training, presence of the management board and a social network of support (red cross, social services, church etc.). The psychological reaction of the victims depends on age, physical and spiritual health, ability to resist and act in a crisis situation, a degree of damage, presence of psychological support.
- 651. For realisation the psychological rehabilitation at a stage of deliverance from crisis are necessary:
- 1. to motivate the victims to active participation in liquidation the consequences of an emergency.
- 2. to carry on psycho-diagnostics and psychological training providing reorientation of the person from passive "victim" in the active person, capable to resist and to cope with a situation.
- 3. to create conditions and psychological support in social environment for the deliverance from crisis with the least losses and in shorter terms.
- 4. to create centres of the social psychological help for long time activity. are important:
- to prevent the suddenness of extreme events by means of their active forecasting,
- to provide personal "understanding" of extreme situation.
- to provide efficient and preventive decisions.
- 652. Inevitable component of an emergency is the risk. The person, who working in emergencies and deciding problem task, is required to have creative and rational logic component. It is necessary to make professional business and personal skills during the training in HIGH SCHOOL on the basis of psychodiagnostics, psychocorrection and anticipatory (outstripping) adaptation.
- 653. They are (confirmed in practice) business games, videotraining, debatable methods and seldom used means as behaviour training, intonation-speech training, psychodramatic correction, game psychotherapy, sensitive training, a transactive method of comprehension of behaviour, an administrative consultation. The use of these means promotes the increase of quality of the participants-liquidators' and leaders' activity in extreme situations. There are 2 categories of the salvers: non-professionals and professionals. The not professional salvers' stress is like the stress experienced by victims of disaster. When the professional help has not arrived yet, they try to rescue the people, but their actions can be ineffectual, and it is a serious trauma for them. For the professionals, the failure at rescue of the child, is stress too. It is better to overcome a stress when you feel yourself as an active participant, rather than a passive "victim".

- 654. The plenty of various emotional reactions arises after emergency. At the beginning many people feel shock or excitation, then tension, but these reactions are short and can be considered as a normal reaction after a traumatic experience. If these reactions are saved on a high level longer, than some weeks, it indicated a post-traumatic stress depression (ĐOSD).
- 655. Uncertainty and unreliability can cause anxiety and a reaction of fear, supported by somatic attributes, that stimulates false perception of a physical illness. An expert psychologist does not decide a problem for a victim, but only creates the certain conditions for a detection of the decision.

The help should be directed to the mobilisation of local resources everywhere, where it is possible. The proper processing of psychological problems connected to disaster, is important and included in the training program of all workers of a public health service, who potentially involved in the activity of rendering assistance to victims.

656. There are some opinions, that the majority of the people do not use a service of mental health, as they do not see themselves as people, who require a specialised support, but consider themselves as victims of an extreme situation.

The majority of these people don't confess in psychological illness. Best diagnostics and account of these frustrations, including ĐOSD can improve the result of treatment.

657. The primary network of public health services due to the central status in the society, can render the necessary support to victims and their families (free of charge).

The professionals of mental health at a national and local level are responsible for the preventive psychiatry training, where it is necessary, for involving a complete spectrum of trades, which have the relation to actions of rescue, being based on psychiatry of disaster as emotional first aid.

The experts organise special brigades generated from the professionals and other people (group of support, psychiatric groups).

658. During the first 6 months are necessary:

- Early diagnostics.
- The support in ĐÒSD of a trouble. The planning for the following 6 months, which are the important period between keen and more long and possibly chronic period. During this period there can be the reactions of "anniversary". Some days can remind what's happen.
- The mobilisation of support on various levels, includes the consultations for victims, and also help and support for their families. It is useful to have the booklets with the information on the problem how to adapt to a specific situation of disaster for various groups: people, who have stayed alive, members of the salvers families, etc.
- 659. The salvers and staff of special brigades render basic psychological support in a situation of disaster. The leaders of mental health brigades should establish the priorities of support actions based on an estimation of traumatic aspects of disaster, and take into account various groups:
- 1. Close relatives
- 2. Victims, who stayed alive and their close relatives
- 3. People, who haven't suffer and have stayed alive

- 4. Spectators
- 5. Saving teams
- 6. Persons, who render the first help (better not professionals)
- 7. Personnel of health
- 8. Responsible persons
- 9. Evacuated people
- 660. The centre which render support can be located in hospital, not far from a place of events or in other establishments (school, hotel). The population should be informed by means of TV and radio broadcasting about the existence of such centre and its telephone numbers.

The brigade of mental health should reach a place of disaster as soon as possible, because the information meeting is very effective means of prevention post-traumatic depressions.

- 661. The groups of psychosocial support can carry out the following actions: information about death and circumstances of death, attendance a place of destruction, (public support mourning).
- "Good conversation" is the main psychotherapeutic instrument. It is important as a surgeon' scalpel and consists of several elements: interpersonal contact, the removal of verbal control, emotional relaxes.
- 662. The criterions for the estimation of behaviour, character and health of a person:
- 1 "Splitting" we observe the world and we speak " all poorly or very well ". That is, " you is my doctor or you is my friend " etc. They do not notice personal subtleties, are not capable to deep, close mutual relation, can not be adequately responsible for their behaviour or a situation.
- 2. Irascibility: a not mature person is subject of emotions, can not constrain his emotions. Mature person can postpone the satisfaction of his needs, and to think over his behaviour.
- 3. Ability to observe "ego", ability for self-reflection, self-criticism, ability to see oneself as objectively as neighbour.
- 4. "Ego" is flexibility (survivability), ability to react on any important loss. Whether he looks quietly TV or simply speaks about failure or about something important. Whether he has dismissed from his work simply looks TV at the evening, or cries or has feelings of shame or difficulty because there is necessity to search for a job. 3-4-5-years is necessary to be rehabilitated, to loose the feeling of loss.
- 5. How is a person react on other people? He does not adhere the rule to behave so that to not get in trouble). He is passive or aggressive. They are strong in spirit to negotiate and to help another. Sociopat there is no responsibility to execute the requirements, which are presented to a society. The next extreme is a person, who feels, that there is no choice, a person-victim, who can not reasonably solve a problem, who hasn't self-control.

The mature person is capable to think reasonably about the needs, which presented

- to him, and does not feel, that he is deprived of the control of his own life. The increased sense of duty, if it goes from within, from soul, which corresponds to internal desire and does not destroy other aspects of life.
- 6. What is ability of a person to estimate the reality? He attentively concerns to the new facts, reconsiders his life, and his behaviour according to the factors. Whether these are the facts or not. There can be a doubt. He is able to change his relations, not only his opinion, but also the opinion of his friends, with which he can and he can not agree.
- 663. In a dialogue with a client the psychologist gives the information, but not imposes it. The main information, is that: psychotrauma is a natural result of accident, that's not happen only with you, there is no brand on you, you are normal, your feelings are normal, but that what's happened abnormal. You have a normal reaction to abnormal problems. Then psychologist should teach how to help. A pain, which is shared with others, is easier (a group of support and rehabilitation). You need to come every week to the centre.
- 664. The reactions of society: together we can make more. The organisation of unions, communities, etc. In a group the therapeutic intervention is connected to the temporary factors: present, past and future.
- 665. Speaking about recovering, they begin from the present. The task is to create a situation of trust to the present. The events from the past are transferred to the present, and around of them the new framework or structure (Freud) is created. This framework creates new sense of event which has taken place in the past. Where there is an external situation, there is also an exit, it is necessary to find good in bad, to find new sense. And than to work with the future. I do not want to be a victim forever, together we have enough forces to go on.
- 666. The Chernobyl catastrophe was the reason of stress among wide levels of the population of Republic of Belarus. Therefore the scientific practical interest to problems connected with psychological rehabilitation of the person, affected by traumatic stress, has increased recently.
- 667. The information on the organisational, methodical and practical approaches to psychological rehabilitation of the participants of liquidation of the Chernobyl catastrophe, veterans of war in Afghanistan is published. Since 1990 the territory of Belarus was announced as a zone of ecological disaster and the State program on overcoming the consequences of the Chernobyl catastrophe was accepted. At this time the state bodies and the not state funds put attention for the decision of socioeconomic, radioecological, social psychological problems.
- 668. Children and teenagers are mostly subjected to influence of the affection of environmental factors. As a result of the researches was determined, that the teenagers from families of migrants:
- 1. Expect the troubles much more often, than from a family of the natives.
- 2. Prefer the active influence on problem situations.
- 3. Are relied on support of family, instead of on friends.

- 669. The fact, that the basic group of risk in result of the Chernobyl catastrophe is children. The special anxiety is caused by those of them, who lives constantly in the contaminated territories (with Cs above 5 ÊU/êm²). For such group of children the rehabilitation and educational centre "Hope" is created in Vileyka region on a Vileyka reservoir coast.
- 670. It is result of the co-operation of Belarus and Germany within the framework of the joint charitable project "Hope -ÕÕI century ". From the every possible forms of children' rehabilitation including rehabilitation abroad, today the best of all is rehabilitation within our republic, where the problem of rehabilitation is decided simultaneously from three sides doctors, teachers and child.
- 671. In rehabilitation work the basic methods is natural, nonmedicamental:
- Ecologically clean food;
- Vitamin-rich food;
- Impellent activity:
- Psychoemotional activity;
- Encouragement of the own initiative of children, disclosing the physical and mental opportunities them, fastening the interests to activity;
- The communications with children in a spirit of partnership;
- Staying in groups of children of the same age;
- 672. Psychological-pedagogical rehabilitation is understood as assistance to weak children and strengthening the available functionalities of child's organism in combination with intensive stimulation of personal development of the pupil, which is carried out by means of:
- 1. "Immersing" a child in active creative activity and "diversion" him from negative mental associations and making him believe in his own capability and strength;
- Inclusion a child in planning, organisation and analysis of life, rest, study, work and formation a partnership and responsibility for his own destiny and destiny of children of the same age;
- 3. Training the skills of ecological behaviour and belief in necessity of harmonious relations with the environment.
- 673. The observation from practice: The children, who live on contaminated after the Chernobyl catastrophe territories wait from the adult, as well as other children, the support in strengthening the belief in their own capability and strength. Taking into account the initiative of the German partners, the government of the enterprise determines the basic pedagogical directions for the centre:
- 1. To assist to the free development of a child, within the framework of his political social and personal responsibility.
- 2. To develop the ability for understanding various cultural traditions and conscious choice of his own cultural national belonging.
- 3. To assist to process of rehabilitation of children and to strengthen the

protective properties of children at collision with the concrete activity.

- 4. To change a habit of meals: the comprehension of importance of a healthy diet in his own life and stabilisation of health.
- 5. To use the religious and aesthetic training (in the program of improvement the professional skills of the employees and in work with children).
- The organisation of process of the psychological and pedagogical rehabilitation is provided by the social workers, psychologists, musicians, sports instructors, doctors, teachers, in such subjects as theatrical skills, psychology, computer games, craft, fine arts. These experts provide activity of 16 studios, where schoolchildren develop their abilities and interests.
- 675. Special medical rehabilitation and treatment of children at the centre are not stipulated. The basic accent is made on the medical control of children health, maintenance the correct balanced diet and active correction of mental health by means of psychodiagnostic and psyhohygiene. Cosy dwelling, comfortable life, various diet, workshops optimise the life of a child within 2 months far from his parents.
- 676. The centre has the experimental status. From the very beginning the experts of the project teachers, doctors, architects noted, that authorised in Ministries of education, and public health of Republic of Belarus the psychological-pedagogical and medical concept of the centre "Hope" is not dogma. The concept of the centre is realised through:
- a) Supervision, estimation and recommendations at a practical level;
- b) Creation the opportunities for each employee to have the understanding " I concept " at the children's centre, through various opinions of the participants of the project;
- c) Creation the own unique role of the centre.
- 677. The children's centre "Hope" should become automatically adjusting system. The crisis psychology put the special attention to an event, to the attitude of the person to this event, to experience of this event. Psychotherapy in crisis psychology is psychotherapy of the crisis estates, which have come after events of traumatic character.
- 678. The basic principle of psychotherapy in crisis psychology is an active position, when the psychologist himself comes to a victim; the preventive approach, when psychotherapeutist starts his work at once after traumatic event. The accent is made on group methods of work, because the psychotherapeutic work is hold on with everyone, who has involved in traumatic event. The work with the victims have a long-term character (one up to three months, and sometimes more).
- 679. In crisis psychotherapy the patients' reactions, experiences, ideas, feelings are considered as normal reactions to abnormal circumstances. The psychotherapeutic programs of work with child, who become a victim of sexual, psychological and physical violence are developed. Within the framework of crisis

psychology the special psychotherapeutic procedure - debriefing is created.

- 680. The analysis of some data of psychological-psychiatric inspection with the confidential form of interview has shown that traits of character and age of probationer influences on formation of adaptation reactions. All inspections, depending on safety of ability to fulfilment the professional activity, were divided into 3 groups: 1-st group "normal" (43,3 %), 2-nd group group of risk (35,5 %), 3-rd group "pathology" (21,1 %).
- 681. The group of risk is made of the persons till 25 years old (58,6 %). More rough forms of disadaptation ("pathology") arise in group of senior age, 36-40 years old (24,7 %). For realisation of the analysis of three selected groups depending on conditions of a service the following criteria of intensity were determined: remoteness from the basic forces and opportunity of blockade in case of an aggravation of the relations with the local population, intensity of daily watches, frequency of participation in operations of emergency character, the household and relation inside the collective.
- 682. It is defined, that in group of risk the opportunity of a nervous breakdown is in direct dependence on intensity of service activity, whereas in "pathology" group mainly from base personal predicts. Nature-climatic, social hygienic and psychosocial factors, put a seal on a clinical picture of psycho-emotional frustration causing the reduction of productive activity.
- 683. The received data determine a primary direction of psychological, social and psychotherapeutic help in divisions engaged in professional activity of extreme situation, ensure mental adaptation and high level of professional activity, and also duly realisation of psychoprophylaxis.
- 684. The treatment of members of the special division of police, repeatedly visited the hot places was conducted. For correction of post-traumatic stress the combination of acupuncture, manual therapy, psychotherapy and homeopathy was used.
- 685. For an estimation of the above described methods the psychological testing (Lusher test) and electrophysiological research (X-ray and skin-galvanic reaction) was used.

As a result of the conducted treatment the high efficiency (86 %) of the non-medicinal methods for correction of post-traumatic stress was proved.

- 686. The estimation of the mental functions and motivations of professional activity to the future practical psychologists (students of 3-rd and 4-th year) was conducted. The educational program for the experts, chiefs, students, whose training and subsequent activity is connected with acceptance of the decisions with dangerous consequences is developed and tested.
- 687. The research work and psychological help to the non-professionals is carried out.
- So, the participants of liquidation of Chernobyl catastrophe receive the treatment at the special rehabilitation and diagnostic centres of radiation medicine.

Half of the patients, have been diagnosed with the help of Wassermann "method" the

type of the attitude to illness ", underestimate "importance" of the illness down to complete "replacement" by denying the fact of illness and "going" to another kinds of activity.

- 688. The another important attitude to illness of this category of patients is sensitive, i.e. an excessive concern to possible adverse impression on the other people, which can be made of the information on illness, and fears of the malevolent attitude, and also use of the illness for achievement of the definite purposes.
- 689. Obviously, that is a parameter of the interpersonal conflict, which brings to psychological disadaptation of such patients. It proves by the fact, that at one third of patients the interpersonal disputed relations are noticed during staying in clinic. The harmonious attitude to illness is revealed at one tenth. It is revealed, that this category of patients has a sensitive type of attitude to illness at the second place.
- 690. These facts illustrates the absence of comprehension of their own needs and motivating of illness. Therefore, this category of the patients requires not a therapeutic but psychotherapeutic help.
- In system of social-psychological rehabilitation specialised "telephone of trust" is widely used.
- 691. The absence of visual contact promotes the reduction of emotional intensity of a patient, but the only verbal character of dialogue complicates the work of psychotherapeutist. The anonymity and opportunity to interrupt the conversation gives the patient the sensation of a freedom choice, personal security, and stimulates the patients' desire to open the aspects of a problem, which he would not dare discuss in clinic.
- 692. The appeal for help at the moment of the most acuteness of experiences has very big preventive importance and prevents the chronification of the status and development of the deviant forms of behaviour. It is necessary it to take into account such kind of help for the people with the limited mobility. The basic task of a psychotherapeutist, who work with the "telephone of trust" is to take off a pressure, to correct depressive frustration and to help the patient to find the way out of the external or internal conflict, and also to supply with the necessary information on opportunities of the decision of his medical, psychological and social problems.
- 693. The state develops the programs of rehabilitation of this contingent of patients, which provide psychological correction of adjusting behaviour and realisation of the large-scale state social programs capable to improve the social psychological status of liquidators of the consequences the Chernobyl catastrophe and the people, who lives in contaminated territory, and that is stipulated by the Law of Republic of Belarus.

The deep study of the situation has allowed to mark out the basic components of general security:

694. - Social: each society - community - tries to organise the protection for the citizens from criminal encroachments, and from any natural emergencies or other influences bringing harm. It includes the legal regulations, moral norms. This kind of

protection includes all social achievements directed to increasing the security of each member of a society, and a whole society.

- Psychophysiological: each man has inherent mechanisms of the adaptation to external influences, such as physical opportunities of the man, the opportunities of his nervous system.
- 696. Informational: it consists of the real information on opportunities of the man, can be inadvertently or specially deformed with the purpose of increase the security.

The combination of all these components determines a general level of security of any member of a society. This dependence is develops particularly when the man gets in extreme situations.

697. Russian Analysis:

In a basis of the methodology of liquidation and the warnings of catastrophes are fixed the following directions:

Realisation of State policy in the field of a civil defence, warning and liquidation of extreme situation :

698. Maintenance of operation and development of a uniform state system of warning and liquidation of extreme situation;

Organisation and realisation of state supervision behind readiness for operations for want of origin of extreme situations and fulfilment of measures on their warning;

Creation both maintenance of readiness of forces and means necessary for liquidation of extreme situations;

699. Maintenance of normative basis:

Development and realisation of federal purpose-oriented programmes directed on liquidation of extreme situations, guard of the population and territories;

Organisation of tutoring of the population, preparation of the officials of organs of management and experts to operations in extreme situations;

700. International co-operation in the field of organisation of work and on warning and liquidation of extreme situations.

For want of organisations of work on liquidation of extreme situations the large role are played by scientific and technical and information support. The practice has shown that it is impossible to supply modern requests acceptable to a state system of warnings and operations in extreme situations, without appropriate scientific and technical policy, and it, on the one hand, should based on fundamental researches, and, on the other hand, should carry brightly expressed applied character.

CONCLUSIONS (Russia)

- The totals of realisation of Chernobyl programs show that the problem of overcoming of consequences of Chernobyl catastrophe objectively has long-term character, and it is not enough of means, selected from the federal budget, for it of a solution in current century. Deadline of realisation of the current programs expires in 2000. The necessary work on preparation of justifying materials for extension of these programs to period after 2000 is now carried out. It is important to evaluate a problem and perspective of overcoming accident consequences on territory of Russia.
- 702. The realisation of a protective measures had led to essential reduction of dozes of an exposure of the population living on territories of Russia contaminated as well as collective doze of an exposure of all population of Russian Federation. The brief totals can be formulated as follows:
- 1. Large amount of works on clarification of radiation situation, ecological, demographic, economic and social performances of territories were performed.
- 2. The work on protection of the population are executed. It includes measures in the branch of agricultural and forest facilities, sanitary protection, decontamination and improvement of the living areas. The programs on improving health services rendering of specialised medical aid social protection of the citizens, affected by accident simultaneously were realised.
- 3. Due to natural processes and executed work there was an objective improving of radiating situation on all territories which have undergone to radioactive contamination. On rural territories of the Belgorod, Voronezh, Kursk, Lipetsk, Leningrad, Penza, Ryazan, Tambov, Ulyanovsk areas and Mordovia it is possible to consider it normalised.
- 4. The groups of increased risk -Liquidators 1986-1987- and children's population of the most contaminated areas of Bryansk, Kaluga, Oryol and Tula regions are revealed. For these categories of the population the long medical observation is necessary.
- 5. Some items of the acting Law of Russian Federation are serious obstacle for completion of work liquidation of consequences on territories of majority of the contaminated areas.
- 703. The main purpose of the new programs should be reduction of negative medical, socio-economic and psychological consequences of accident for population and liquidators to possible low level as well as ecological and economic rehabilitation of territories.
- 704. For realisation of measures the federal budget, budgets of the subjects of Russian Federation and outbudget sources should be attracted. For reaching the indicated purpose it is supposed to realise a complex of measures on the following main directions:

Perfecting of normative documents including modification in the Law of Russian Federation :

705. Medical rehabilitation of the citizens suffered by Chernobyl accident;

Social-psychological rehabilitation of the population;

Radiation monitoring on contaminated territories;

Radiation monitoring of agricultural products and foodstuffs;

Reduction of exposure dozes of the population and ecological improvement of territories :

Socio-economic rehabilitation of the population of the contaminated territories.

706. With the purposes of increase of efficiency of these measures it is necessary to continue scientific - practical work on problems on overcoming of consequences of catastrophe, co-operation to foreign, international, public and other organisations, work on operating monitoring behind a course of realisation of measures and their efficiency, information and analytical maintenance of the Program.

RECOMMENDATIONS - Oksana Garnets

- 707. The expertise accumulated within the Communities Centres Project could be used for the following purposes under the following conditions:
- technogenic catastrophes in the dangerous enterprises, which can be resulted in environmental pollution.
- natural disasters (earthquakes, tsunami, floods etc.)
- abrupt social-economic changes (closing of enterprises in the monoindustrial cities, sharp diminishing of producing, change in the structure of enterprise etc.)
- political changes as the result of military conflicts, dividing (separation) of a country, changes in government or in the social system.
- 708. This experience can be applied in the cases when large number of people have been suffering for a comparatively long period of time from the consequences of a natural or technological catastrophe, or a war when people have received traumatic experience and have developed different forms of stress -related psychological problems and behaviour patterns:

709.

- Not only individuals but large groups of people and even communities as whole, for some reasons (catastrophe of any origin, war etc.) are facing the necessity to change their mode of life and adjust to new life style.
- Large numbers of people have been resettled, they have lost their houses and are obliged to adapt to a new place, new social or new natural environment.

710.

- Social links have been disrupted, people have lost(fully or partly) their common social relations (family, relatives, neighbours).
- People are forced to live under unfavourable ecological, socio-economic and psycho-social conditions.

711.

- People affected by the unfavourable consequences of the disaster have very small if any control over the situation.
- Traumatic experience in individuals, groups and communities is reinforced by other negative factors that the following the main one.

712.

- Constant fears related to consequences of the catastrophic event have been existing in the population for a long time.
- Disrupted (or not existing in some cases) community mechanisms enhance the rehabilitation of people and the localities.

- 713. The expertise that was obtained in course of the project implementation could be also used in training professional psychologists and social workers to assist people in crisis communities, especially in following areas:
- Encouraging people to take the responsibility for their own lives, express more initiatives to change the situation

714.

- Encourage people to develop adoptive life styles and ways of behaviour in the given situation
- Prevention of ineffective and destructive ways of behaviour (crimes, drugs using, aggression, auto aggression etc.)

715.

- Building up the community, developing new links and interaction mechanisms within the community, developing community action as whole
- Development of self-management techniques, social activation and social control mechanisms.

716

- Developing volunteer and NGO action in the communities as a mechanism that involves people into self and mutual support action.
- 717. This experience can be also applied:
- 1- For establishing (widening) of the service systems (systems of help delivering) in the regions, where catastrophic events took place, or in the places of new settlement(resettlement) of people, when the acute phase of catastrophe is already in the past, and the long period of people rehabilitation is in future.
- 2- Training students (social workers, managers of social sphere, teachers, psychologists and other specialists) the technologies of giving help to population, experienced a technological or other ecological catastrophe.