



White Paper

on the UNESCO – CHIC Group (China) Biosphere Integrated Rural Urbanization Programme (BIRUP)

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The Issue: Urban and Rural Discrepancies - a global problem

Across the world, the gap between rural and urban incomes, social security and employment opportunities is a major development issue. Many governments are seeking ways of helping poor farmers and rural workers to escape poverty yet either continue to contribute to food production or obtain meaningful urban employment. This gap is often part of a disparity between wealthy and less affluent regions of country. Such imbalance between one part of a country and another may be a cause of instability and potential social unrest. While rural communities, including those of China, tend to be less relatively well endowed with financial capital than those of urban area, they are stewards of immense wealth in terms of the natural capital contained in the ecosystems that provide vital goods and services for the entire population. One example of such capital is land suitable for agriculture.

This said, food security requires more efficient and highly productive agriculture. Use of modern agricultural technology, high quality seeds and plant stocks, and efficient marketing requires larger farm units than those typically cultivated by small farmers. Achieving the necessary consolidation of land holdings involves re-arranging land tenure systems and enabling the present owners to be able to gain a benefit from the change and to improve their lifestyles. Changing land management systems is a difficult issue that requires delicate handling and ensuring fairness to all parties involved. This agricultural production improvement has to be coupled to an integrated food processing, transport, wholesale and retail supply chain. It also should be done in a way that brings social and cultural benefits by improving the quality of people's lives and the diversity of opportunity for young people. Such improvements have to create development that is economically, socially and environmentally sustainable. They need to be conducted as part of a broader strategy for wise land use management, including conservation and sustainable use of biodiversity, such as forest ecosystems, areas of natural vegetation, and rare and endangered species, and protection of the cultural heritage. All this is being done in the face of a changing climate and a growing world population.

To find a way to answer these questions, China has been seeking solutions within the basic principles of its fundamental land ownership system. These solutions take a long-term city and region approach, by facilitating the movement of some farmers into towns and cities, ensuring they have employment opportunities, and modernizing agriculture.

The Route to a Solution: China's ideas

The key to the solution is a transfer of land-use rights. Through market-oriented contracted land, forestry land use right transfer, so that the land can be consolidated for scale management. Farmers can obtain the usufructuary earnings. To transfer farmer's homestead use right, gives farmers a regular monthly income, enables their old housing to be sold, and thus the farmers can moved from antiquated accommodation without modern sanitation and other services into modern apartments. Reform of the urban residential permit (Hukou) system is a complementary part of the solution, enabling farmers who have transferred their land use rights to move into an urban area, if they so wish. Such reform would enable former farmers to enjoy all the social benefits now available to urban people. The equal treatment would affect rights of employment, pensions, housing, education and medical care. For those remaining in the rural areas, innovative funding is required, enabling loans to be secured against rural land contracting right, forestry right, and rural homestead (farm house) occupancy right.

The Experimental Solution: Chongqing's Land Release and Financing Initiatives and Ba'nan's Integrated Rural-urban Development Strategy

In 2008, the Chinese central government requested Chongqing to experiment with land release. All provincial-level governments can experiment with such measures, but Chongqing followed a unique scheme. Mayor Huang Qifan of Chongqing Municipality has led the city on a path to modernisation based on industrialization, urbanization and coordinated action to integrate rural and urban areas in development fitting the unique circumstance of the municipality. He envisaged three integrations around infrastructure, social security, and public services.

1. Reform of the land occupancy situation by introducing the sale of land use rights. Establishing the Chongqing Country Land Exchange allowing farmers to transfer their land use rights into a land quota certificate. Exchange may sell these rights to a third party. The new holder can use the certificate to acquire a right to occupy land in areas within existing approved quotas for future urban development. Thus land is released for urban growth, but the remaining farm land can be consolidated into larger production units, permitting mechanised farming, economically efficient tree crops, and high yield crops.
2. Reform of the residential permit (Hukou) system in Chongqing, enabling people who have sold their land use rights to seek work and residence in the city. Those with an adequate reliable income to pay the rent are entitled to apply for social housing and to enjoy all the social benefits to which urban residents have access. By 2020, six million rural residents in the whole municipality are expected to have re-registered as urban residents, making 50% of Chongqing's people city and town dwellers.

3. Reform of land property right and rural finance. Establishment of a financing guarantee company, incorporated with state-owned capital, with a guarantee capacity of about 100 billion Yuan. Loans secured with land contracting rights, forestry rights and farm homestead land in rural areas of Chongqing enable are thus growing steadily. 30 billion Yuan were expected to be lent in 2011. This rural financing revitalizes stock assets in rural areas, generates new productivity and advances the comprehensive development of rural Chongqing.

Ba'nan District, a district of Chongqing City, is the miniature original of Chongqing, where urban-rural dual structure has existed for a long time. Party Secretary Li Jianchun seizes the opportunities of Chongqing urban and rural reform pilot, according to the "Urban and rural economic integration prosperity, Integrated rural and urban facilities construction, Integrated management of urban and rural social" concept and by the conversion of three ways "production, employment, lifestyle" to promote "Agricultural modernization, Professionalization of farmers, Rural communities", and vigorously develop modern urban efficiency agriculture, rural tourism and ecological health pension industry, to construct ecological modern happy farms and features towns, to build a "town in the rural, rural in the city" development pattern, to achieve the vision of "Integrated urban and rural development demonstration area" or experimental zone.

Ba'nan's development ideas ensure food safety, ecosystem services protection, social welfare, and original ecological resources preservation while urbanization that maintains Ba'nan's beautiful rural scenery as well as presenting advanced modern harmony civilization.

At present, Secretary Li is promoting a project aimed at building a comprehensive infrastructure, the development of large-scale industrial zone, to maintain a good ecological environment and promote sustainable economic development and improve the quality of life of local residents.

The key aspects of Ba'nán's rural programme are:

1. Integrated urban-rural development with comprehensive infrastructure, specific function zones, vivid industrial features, beautiful ecological environment, sustained economic development, fine livelihood, and organized social management.
2. Activate idle rural assets to increase the value of urban-rural recourses.
3. Promote agricultural industrialization through concentration of landholding.

Currently has only 2.9% of Ba'nán's land is urbanised and 56.7% of its people are still rural residents. The District is topographically divided by four parallel lines of hills which separate parallel fertile river valleys. Traditional smallholding farming dominates the landscape. Major industrial development is concentrated to the west of the fourth line of hills, along the valley of the Yangtze River and is expanding in the next valley east of it in the Huanqiaoping Economic Zone. Further east, the District is largely rural but with several important towns, including Mudong, Dongquan and Jielong.

Rural reform has already begun, with 208 special co-operatives, some using newly consolidated land, becoming effective production units for crops as varied as pears, peppers and tea. Such co-operatives enable land to become a sharing holding system where all the farmers participate in the gains from their combined efforts. The ten-year old co-operative pear orchard near Ersheng provides an annual income of 20,000 Yuan to 3000 households. This income is three times the average rural income in this part of China.

Many of the new co-operatives aim at high end markets. A tree nursery sells whole trees ready for street or courtyard planting direct to land developers for their new construction projects. The tea produced in a nearby plantation is a well-known Chongqing brand commanding a premium price. Plantation. A special local hot pepper berry grown on steep slopes needing a permanent vegetation cover is also marketed as a special brand in Chongqing. These local initiatives show that highly specialised agricultural production and marketing has succeeded in Ba'nán.

Now, an extension of these successes in co-operative specialised production is being developed by the co-operation of Ba'nán District, the CHIC Company and UNESCO in developing a more extensive and more complete rural-urban integration. Leaders and administrators in both the Municipality and the District have emphasised at all levels that the welfare of rural people is their central concern. Farmers have generally seen the advantages of the land use right transfer system. Already about 14,000 acres of farmland use rights have been transferred in Chongqing municipality. Farmers seem satisfied, one at Ersheng in Ba'nán saying "As long as the money is paid to me every month on the right day at the right time, and I have a little land to grow my own vegetables, I am happy; but I like to continue working".

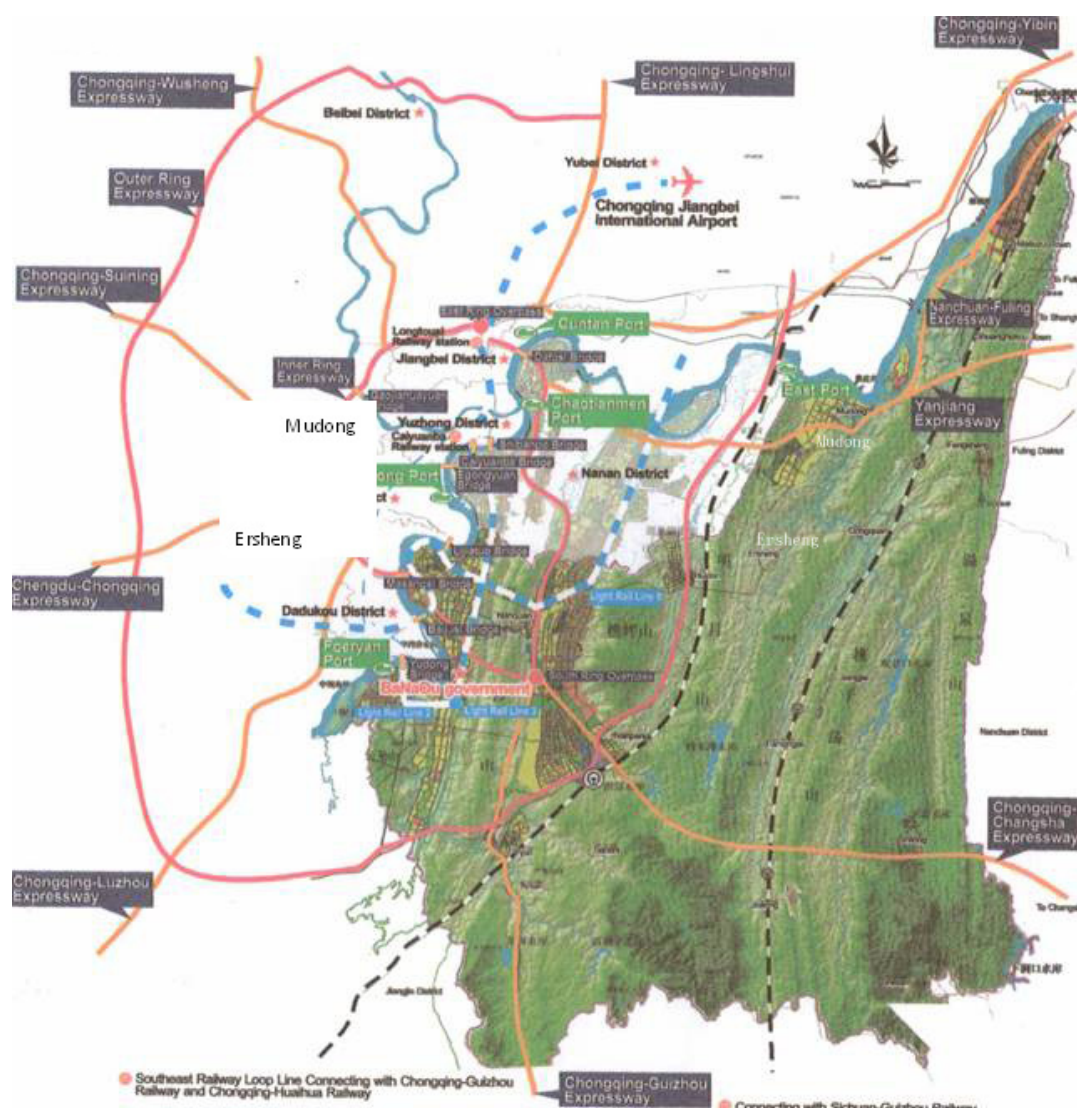


Fig. 3 Map of Ba'nán District showing the topography and major transportation facilities and Huimin and Ersheng, two key areas for the BIRUP Project

The Delivery of the Solution: the CHIC/ UNESCO BIRUP Partnership

The BIRUP project integrates rural land consolidation with new agricultural projects, training of farmers, expansion of urbanised rural villages, crop production, food processing, training, education and a new sustainable, high tech education and science entrepreneur city, emphasising agricultural, agribusiness and rural sciences. The overriding BIRUP vision is the interlinking of six forms of harmony:

1. A green economy.
2. Social stability.
3. Eco-harmony.
4. Cultural heritage.
5. Universal education and understanding of humanity's place in, and impact on, the biosphere.
6. Technological innovation to improve sustainable human life and biodiversity.

The vision is supported by the idea that a practical, rigorous, agribusiness education driven by a sustainable land use and agricultural operation system can support rewarding rural lifestyles and bring the benefits of urbanisation to rural people, without them having to move away from the areas their ancestors lived in.

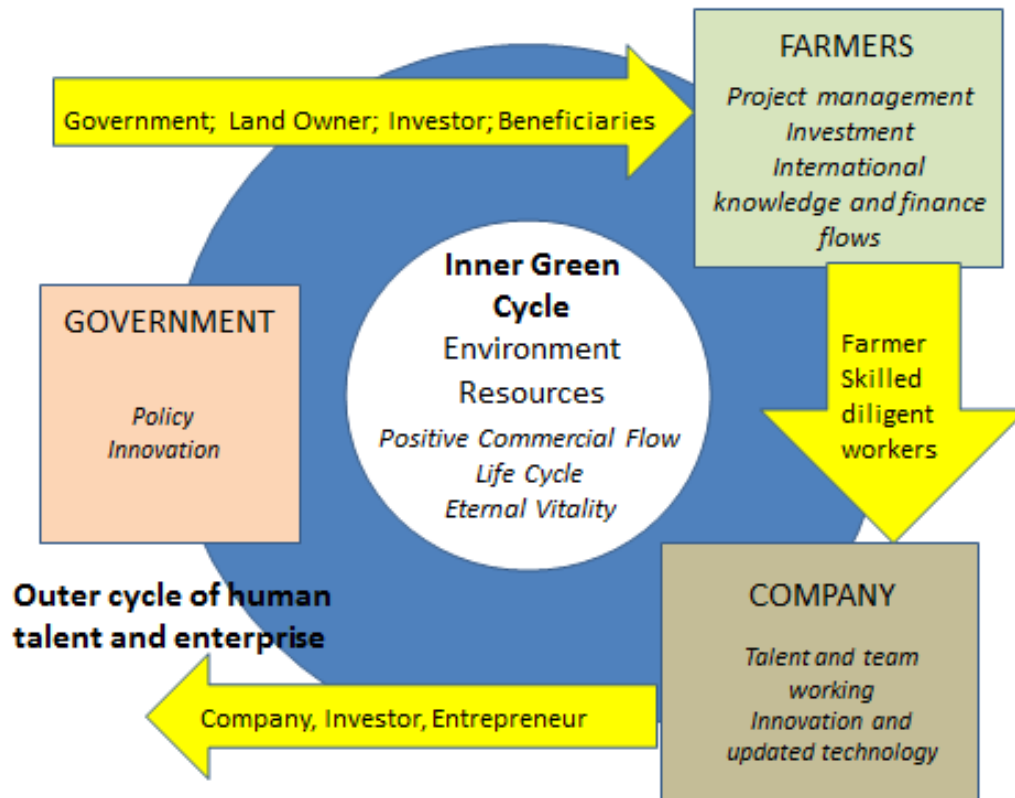


Fig. 4 The BIRUP mechanism of two sustainable virtuous cycles, the outer cycle of stakeholders (farmers, enterprise and government), the inner green cycle of environment, resource and human life. The two cycles each depend on all their component parts and upon each other which are eternal vitality: sustainable human commercial success relies on a sustainable environment, while commercial failure usually leads to a degraded environment

The scheme is based on CHIC’s new economic innovation model, to achieve new industries and circular economy that have good economic returns, low resource consumption, low environmental impact, plenty employment opportunities, that is:

- Market demand-oriented.
- Based on technology innovation and efficiency improvement.
- With system and mechanism innovation.

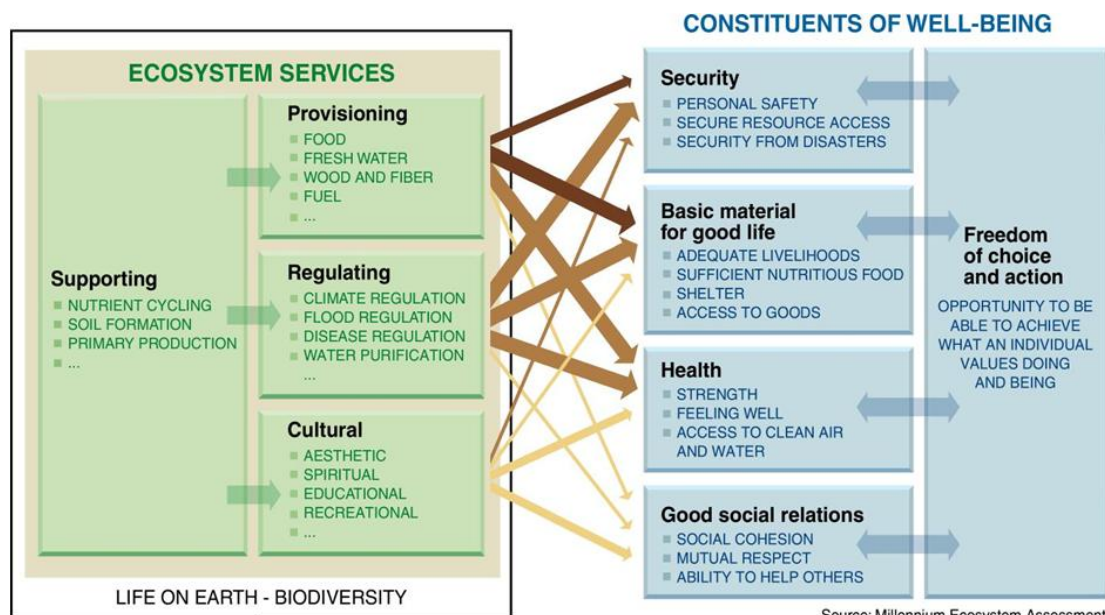
With the help of UNESCO, the whole redevelopment of the rural area will be fitted into a Biosphere Reserve concept under the Man and Biosphere (MAB) Programme maximising sustainable development with nature conservation through the application of good science. This will preserve the natural capital of the regions in terms of key ecosystem goods and services, including “natural” vegetation on the steepest slopes and mountain summits, patches of woodland, and urban green areas in a carefully planned green infrastructure network. This will help to retain the diverse rural landscape character that Ba’nan presently enjoys (See Box 1 on Ecosystem Goods and Services).

BOX 1: Ecosystem Services and Human Well-Being in Ba’nan District

Between 2001 and 2005, the Millennium Ecosystem Assessment (MA) carried out the most comprehensive assessment to date of the planet’s ecosystems health, with the participation of over 2,000 of the world’s most renowned natural and social scientists.

While bringing to the knowledge of decision makers and society relevant findings on how seriously humans are compromising global environment, the MA largely contributed to the understanding of the benefits provided by ecosystems to people and their well-being.

The MA grouped ecosystem services into 4 categories: provisioning, regulating, cultural and supporting, and explored the connections of these services with the 5 components of human well-being, as the chart below demonstrates:



ARROW'S COLOR Potential for mediation by socioeconomic factors	ARROW'S WIDTH Intensity of linkages between ecosystem services and human well-being
Low	Weak
Medium	Medium
High	Strong

According to the MA, the future of biodiversity and human well-being largely relies on how land management practices can successfully ensure ecosystems' capacity to deliver services over time.

Ba'nán District can become a sound world best practice example of integrated land management promoting rational urban growth, rural wealth and the maintenance of a wide array of ecosystem services that will allow for both economic development and nature conservation.

The District has considerable natural advantages, with 43% of its land under forest, 56 km of Yangtze River frontage, 93 lakes, over 1,000 rivers and streams, 5 islands, hot springs, mountain scenery. It also has a varied set of cultivated land and expanding urban areas. For all that, Ba'nán boasts enormous potential for increasing its ecosystem service-based economy in such sectors as agriculture, tourism, recreation, timber, and firewood. Additionally, the district's wise ecosystem management will increasingly enable urban, peri-urban and rural dwellers benefit from clean water, climate regulation, soil erosion and flood control, educational possibilities, and ultimately the preservation of landscapes that are integral part of their cultural heritage.

The work will initially be concentrated on 11 interconnected projects that will offer diverse employment opportunities in Ba'nán, greatly increase rural production and thus enhance Chongqing's food security and open up new domestic and international marketing opportunities. These projects will lead to the growth of more stable, modernised rural communities, and above all see farmers, with greatly improved financial circumstances, enjoy both the benefits of rural living and, when they move into towns, the advantages of urban resident status. The projects will be a major first step in building a new and more harmonious relationship between urban areas and the surrounding rural zones on which they are so dependent for ecosystem goods and services, such as clean water, food, renewable energy and recreational opportunities.

The 11 CHIC-BIRUP projects are:

1. **The Wubu River Citrus Plantation:** Over 4000 ha using modern agricultural technology for planting and harvesting, insect pest monitoring and control, fruit cultivation and processing.
2. **Huiming Modern International Agri-business Innovation Town:** A modern international education zone with facilities for scientific research, agri-business, and innovation-based enterprises, co-operating with international research universities and high-tech entrepreneurs.
3. **The Maliu Euro-America Food Processing Industry cluster:** A food processing and logistics base providing for the treatment of 300,000 tons of citrus annually.
4. **Wubu River Eco-Rural Corridor Project:** A sustainably designed zone for urban agriculture, leisure agriculture, and ecological biotic health products.

5. ***The Mutong-Niuchaowan International Education Base of MBA and Enterprise HQs area:*** A high-level MBA Business School/College leading to some 10 corporate headquarters, mainly of food and agricultural sector enterprises, locating nearby.
6. ***Yunzhuan Mt. organic sightseeing agricultural gardens:*** a base for agricultural tourism and organic vegetable growing is planned.
7. ***Euro-America Style Rural Tourism on Nanpingba Island in the Yangtze River:*** leisure and tourism related to the food industry.
8. ***The Qiaopingshan Sports Park:*** a sports and leisure theme park with residential area and resort hotels.
9. ***The Nanpen Logistics Base and larger-scale agriculture elements market:*** A 133 ha multi-functional logistics area serving all Chongqing and western China.
10. ***Chinese Buddhism Zen-Tea Culture and Tourism zone inside Tianxin temple:*** using the local cultural resources of Buddhism, the natural resources of Tianping Mountain and local tea plantations.
11. ***Forest Cemetery:*** in which to construct a cemetery or eco-cemetery.

These projects all contribute to the goal of achieving a better link between the financial capital and high investment of expanding urban areas and the natural capital and ecosystem services of rural areas. Alongside increased, yet sustainable, use of ecosystem goods and services to support rural and urban populations alike, will be a higher level of education and understanding of how the land and its natural endowments, forests, water and soils, can be used wisely and sustainably in order to provide the needs of both present and future generations.

Conclusion: a Model for China and other Areas of the World

By working together at the interface of culture, industry, conservation and harmony of communities with nature, CHIC and UNESCO are delivering an experiment that will:

- Achieve agricultural industrialization by developing large scale modern agriculture.
- Change farmers to residents by providing various job opportunities.
- Enhance villages to communities by improving public services and facilities.
- Create a new lifestyle by constructing a high quality living environment with recreational and leisure facilities.
- Attract talents and investment by creating high-quality international education chain.

- Promote economy growth by training talents and developing green industries.

The modernisation and concentration of agriculture in this experiment is relevant to much of China, being directly linked to improving food supply chains and food security. The bringing of new employment opportunities to rural areas helps to safeguard livelihoods for future generations, just as the sustainability and green infrastructure planning will safeguard ecosystem services and environmental quality for those upcoming generations.

What is done in Ba'nán, Chongqing, is likely to be applicable elsewhere in Asia and in other continents. It will create:

- A methodology and range of experience to share with UNESCO partners in Asia and Africa.
- International Cooperation, including South-South cooperation in biodiversity conservation, management of the biosphere, ecology, sustainable development and related domains of research and development.
- A world class education and service center set in a distinguished agribusiness and agro-ecology town community.
- A basis for an international integrated rural-urban development forum.
- An international center for training, lifelong education, continuing professional development and workshops focusing on the green economy and sustainable agriculture.
- A prosperous rural area with new towns and facilities set among a strong cultural diversity and heritage, attracting foreign visitors.

The project team will be reporting to local, national and international meetings and business forums about the projects and its successes and challenges.

The partners in the Project

The UNESCO Man and the Biosphere (MAB) Programme

The Man and the Biosphere (MAB) Programme is an Intergovernmental Scientific Programme aiming to set a scientific basis for the improvement of the relationships between people and their environment globally. Launched in the early 1970s, it proposes an interdisciplinary research agenda and capacity building that target the ecological, social and economic dimensions of biodiversity loss and the reduction of this loss.

Concerned with problems at the interface of scientific, environmental, societal and development issues, MAB combines natural and social sciences, economics and education to improve human livelihoods and safeguard natural ecosystems, thus promoting innovative approaches to economic development that is socially and culturally appropriate and environmentally sustainable.

The agenda of the MAB Programme is defined by its main governing body, the International Co-ordinating Council in concert with the broader MAB Community. For implementation of its interdisciplinary work on-ground, MAB relies on the World Network of Biosphere Reserves, and on thematic networks and partnerships for knowledge-sharing, research and monitoring, education and training, and participatory decision-making. Sub-programmes and activities focus on specific ecosystems: mountains; dry lands; tropical forests; wetlands; marine, island and coastal ecosystems; and urban systems.

Together with the Chinese Academy of Sciences (CAS), the Scientific Committee on Problems of the Environment (SCOPE), MAB organized the International Symposium on Urban Futures and Human and Ecosystem Wellbeing in Shanghai, China, 26-30 October, 2010. The symposium brought together scientists, researchers, planners and managers concerned by the impacts of rapid urbanization, unsustainable development and the excessive consumption of resources of cities on the ecological wellbeing of the larger region to reinvent the urban ecosystem mission of the UNESCO-MAB Programme. The adopted Shanghai Declaration on Urban Futures and Human and Ecosystem Wellbeing emphasizes the need to further strengthen and support interdisciplinary and international cooperation on sustainable urban development in existing, new, and rapidly expanding cities. The cooperation with the CHIC Group is one such example.

UNESCO-MAB and SCOPE have established a joint International Expert Group for the Urban Futures Programme which dedicates to further advance the concept of sustainable urban development. The joint policy relevant, research, assessment, capacity building and outreach Programme contains several major areas, including making full use of UNESCO MAB biosphere reserves to enhance urban sustainability and to improve the relationships between cities and the ecosystems of which they are a part. This White Paper has been prepared by Members of the Expert Group.

Link:

http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/SC/pdf/sc_mab_shanghaiDec_EN.pdf

CHIC Group

Headquartered in Shanghai, CHIC Group is a transnational corporation which has businesses in America, Europe, Oceania and Asia. CHIC Group entered into China in 1995. Now it has 19 branch offices, 8 plants, over 450 managers and more than 10,000 employees around the world. Its business consists of six divisions, namely food, agriculture, home and garden products, medical equipment, integrated supply chain management solution and execution, and ecological integrated rural urbanization project (IRUP) development and investment. It is the largest export-oriented fruit processing enterprise in China, with its processed mandarin orange products taking up 45 percent of American market.

CHIC Group is positioned as a SIMIS company, providing Solution, Investment, Management, Innovation and Service to its strategic partners throughout the world. With expertise in integrated supply chain management, CHIC Group is a great value creator for its strategic partners.

CHIC Foods management team is implementing an innovative efficient supply chain and transforming a traditional industry into one with distinct product differential, new technologies and agricultural practices that enhance and create value for the farmers, communities, strategic partners and customers.

CHIC Knowledge Centre of Excellence (CKCE) is the most important base for personnel training, ensures that CHIC maintains leadership in innovation, research & development and management. CKCE will become BIRUP's training base and act as a window for national government officials, corporate executives, scientists and civil institutions to understand the international dimensions and needs for sustainable development, green economy, protection of the ecological, environmental and cultural heritage and for education on all aspects of agribusiness and environmental management.

CHIC Group's official website: <http://www.chicgroup.com/>

www.unesco-birup.org