

The ecological agriculture efforts of “Aya Town” co-existing with nature

Aya Biosphere Reserve Promotion Division of Aya Town

Key Messages/Lessons learnt

- Collaboration of regional development based on the twin pillars of an evergreen forest protection and restoration plan, and efforts for ecological agriculture
- Located in the northernmost evergreen forest ecoregion of East Asia where many Japanese endemic species live and grow

Largest natural evergreen forest left in Japan.

A natural forest of beech trees exists as a remnant of the Ice Age in a high altitude area.

Since 2005, we have been working on the “The Aya Conservation and Restoration Plan for the Lucidophyllous Forest Zone of the Aya River Basin (The Aya Lucidophyllous Forest Project)” aiming to protect and restore the evergreen forest.

- Aya Town intent on valuing and nurturing its natural ecosystem

We have been implementing regional promotional measures that ensure co-existence between nature and people utilizing such means as collaborations with organic agriculture which has been cultivated for over half a century based on the “Promulgation of the Ordinance for Nature Protection in Aya Town”, “Promulgation of the Ordinance concerning the Promotion of Agriculture that Respects Natural Ecosystems” and “Landscape Ordinance of Aya Town”.

Biosphere Reserve description

Aya Town is a small town with a population of approximately 7,200 located in Higashimorokata county of Miyazaki Prefecture in Japan. Located in the northwestern part are the southernmost mountain clusters of the Kyūshū Chūō Sanchi from where two rivers flow down to the south-east. Sandwiched between these two rivers is the townscape of Aya town in the middle of an alluvial plain. Stoneware dating back about 12,000 years has been found in the town, and so it appears that people were already living in this area around this time. Thriving in the water basin is the largest natural evergreen forest in Japan of approximately 2,500 ha, and a beech forest which is thought to be a remnant of the Ice Age also exists in a high altitude area of 1,200 meters above sea level. It has been confirmed that here there are large numbers of plants and animals endemic to Japan whose populations have been decreasing in

other areas of the country. In 1982 this area was designated the Aya district of Kyushu Central Mountains Quasi-National Park.

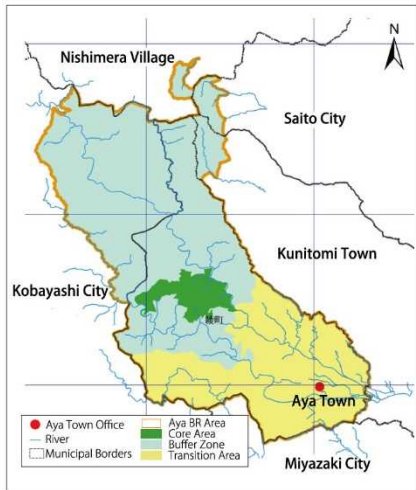


Figure 1: BR Map of Aya

BR challenges

The view that "human beings exist by living in an ecosystem that consists of circulation and regeneration", which had developed from the activities that were being conducted to protect the forests, was responsible for promoting a "woodcraft town" and "healthy vegetable cultivation based on the campaign for a *hitotsubo* (six square feet) vegetable plot", which were the predecessors of the projects for "Genuine Town Development" and "Development of a Hometown Equipped with Circulating Organic Agriculture". These days, this has been passed down in the form of ecological agriculture, becoming one of the sustainable core industries of Aya Town. Moreover, this has become a driving force to promote regional promotion measures that emphasize the coexistence of nature and people.

Initiatives/Actions on SDG XX

SDGs Target 2.4

Contribute to securing a sustainable food production system and implementing a robust agriculture, which improves the quality of the land and soil through innovative means.

SDGs Target 12.4

Contribute to reducing the emission of chemical substances and waste into the atmosphere, water and soil in order to minimize the adverse effects on human health and the environment.

Certification of natural eco-friendly agricultural products

Agricultural products produced in Aya Town are certified as natural eco-friendly agricultural products evaluated according to the certification criteria created by the "Council for Agriculture that Respects Natural Ecosystems" composed of representatives from organizations representing academic experts, producers, consumers, and others. This certification system (established in 1989) was the first system for national standardization and certification of organic agricultural products, and the work of certification is carried out by the "Organic Farming Development Center".

In order for producers to be certified, they must first receive "farmland certification" dependent on an inspection of past agricultural land and soil management. Next, based on an assessment of management of crops cultivated on the certified farmland, the producer will receive "production management certification", and the crops will be ranked comprehensively through a combination of both certifications. Strict requirements need to be met such as the keeping and submission of cultivation control records. Only by going through these processes will a "certification label" be issued that may be affixed to these natural eco-friendly agricultural products allowing them to be shipped out. There are three certification classifications, namely, Rank A (gold), Rank B (silver), and Rank C (copper). All of these are certified subject to strict standards, and can be said to be proof of the safe and secure nature of these natural eco-friendly agricultural products.



Figure 2 (Photo: Agricultural products produced in Aya Town)

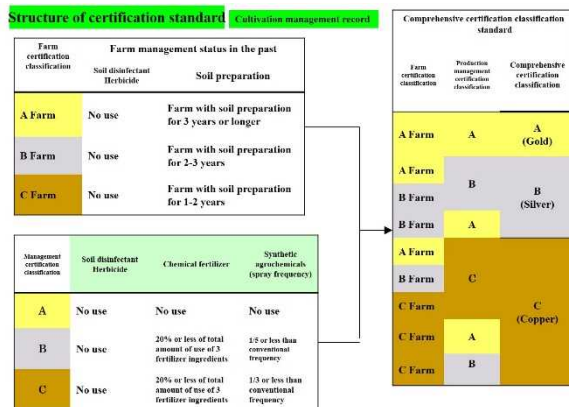


Figure 3 (Photo: Mechanism of certification criteria for eco-friendly agricultural products)

Table 1 Changes in the number of registered eco-friendly agricultural farmers and in the areas of cultivated land in Aya Town

年度	1990	1995	2000	2005	2008	2010	2013	2015
登録農家(戸)	113	271	384	403	405	387	371	367
登録面積 (ha)	93.8	221.9	304.3	316.6	318.4	292.4	370.5	370.5

Table 2 Status of certification of agricultural products by rank (2013) (excluding cases of submission of cultivation management records for farm-fresh delivery by the Honmono Center, and facility cultivation)

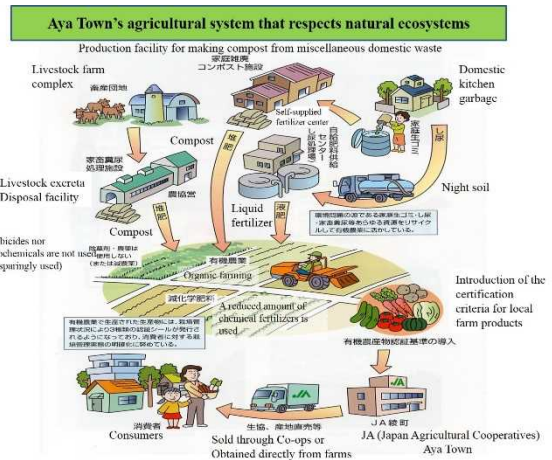
(Source: Organic Farming Development Center)

A	B	C	-	合計
1,804件	172件	20件	176件	2,172件
83.1%	7.9%	0.9%	8.1%	100%

Taking a look at the number of registered eco-friendly agricultural farmers and registered areas, 367 farms were engaged in eco-friendly agriculture up until 2015, and the amount of arable land increased between 2010 and 2013. Regarding the certification ranks, Rank A constitutes an overwhelming majority.

Soil cultivation for ecological agriculture

In order to secure organic fertilizer, which is the basis for soil-making, a self-sufficient fertilizer supply facility to turn human waste into liquid compost was built in the town in 1973, and a livestock manure waste treatment facility was built in 1981. In 1987, comprehensive composting equipment for composting raw garbage thrown out by the households was set up, and a system was made to return organic matter obtained in the town to the farmland and to recycle resources.



Aya Town's ecological agriculture system

Practical Outcomes/Achievements

As well as establishing a system for promotion of ecological agriculture, every year, we hold such events as an "Organic Agriculture Promotion Competition" and "Food Friends Plaza Connecting the Towns and Villages" in order to promote exchanges with the consumers, and to spread awareness of organic agriculture. Various

initiatives are being carried out in the town such as the promotion of “food education” leading to school meals being prepared through local produce consumption campaigns and the passing on of a traditional food culture. Many participants both local and otherwise gather for town-wide activities organized by the local government, JA Aya Town, and private organizations. Recently, the safety and health consciousness of general consumers has been increasing even with regard to the distribution of natural eco-friendly agricultural products, and distribution is expanding not only within the prefecture but also outside of the prefecture. In recent years, natural eco-friendly agricultural products produced in the town are also being used by public town facilities and in school lunches.

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Figure 5 (Photo: Food Friends Plaza
Connecting the Towns and Villages)

References

1. “Guide to natural eco-friendly agriculture and organic agricultural products in Aya Town”, Organic Farming Development Center (2010)
2. Omoto, Reiko (2017) Local Certification – Distribution System Created by the Region

Acknowledgements