Current Developments and Policies in Organic Agriculture in ROC (Taiwan)
The country paper from ROC(Taiwan)
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1. Introduction of the profile and agriculture in Taiwan

Republic of China, commonly known as Taiwan, is an island country located about 180 km off the south-eastern coast of China. Taiwan's 35,808 square kilometers are home to more than 23.5 million inhabitants, which is one of the most densely populated countries in the world. Due to its location in both subtropical and tropical region, the weather in Taiwan is hot and humid in summer, with averagely 27-30℃ and 3-5 typhoons per year, but in winter, the northern experiences steady rain and cool weather, while the southern is arid and warm. According to the agricultural statistics yearbook 2017, there are around 793,027 ha agricultural land in Taiwan, consists 22% of the total area. There are 775,310 farming households, approximately 80% of the farming households own less than 1 ha agricultural land. 55% own less than 0.5 ha.

2. History and statistics of organic agriculture in Taiwan

The origins of organic farming in Taiwan date back to 1986, when the government started to assess the feasibility of organic agriculture in Taiwan. Subsequently, pilot projects, researches have been practiced and conferences have been raised. In 1999, the council of agriculture promulgated regulations of organic agricultural production and certification. But it was not until 2007, when council of agriculture promulgated “Agricultural Production and Certification Act”, was organic product firstly stipulated to be legally certificated before sold. Due to the concept of food safety and environment protection expanded, Executive Yuan set organic agriculture as main scheme of administration in 2009.

Organic agricultural land area increased gradually since 2009. From 2009 to 2011, except 587 ha organic agricultural zone have been established, 12 certification bodies (11 for agriculture and 1 for animal husbandry) were accredited by Council of Agriculture. As organic agriculture increased and in order to promote the development of sustainable agriculture, council of agriculture promulgated “Organic Agriculture Promotion Act” in May 30th 2019, which is the first bill of organic agriculture.

Until August 2019, the organic agricultural land area has reached 9158 ha. In addition, since 2017, we started to promote the eco-friendly farming. It is a farming way that similar to organic farming but without certified. Instead, eco-farmers have to be in the officially approved groups and registered to be managed. Until this August, there are 3,492 ha eco-friendly farming area, added up with the 9158 ha organic area, there are 12,650 ha, consists more than 1.5% of agricultural land (see figure 1). There are currently 3,719 organic agricultural farms and 459 households of organic agricultural processing, packaging and distribution. Rice(27%) and vegetable(29%) are the main crops(see table 1). According to the FiBL statistics 2017, The percentage of organic area in Taiwan ranks number 10 in Asia and number 77 in the world.
3. Policies to organic agriculture

The new promulgated bill “Organic Agriculture Promotion Act” has been established for maintaining water and soil resources, ecological environment, biodiversity, animal welfare and consumer interests, and promoting agricultural operation that is eco-friendly and sustainable use of resources. Promotion of the eco-friendly and organic farming, management of accreditation and certification bodies, counseling of production and marketing and mutual organic equivalence are the main current policies to organic agriculture.

3.1 Promotion of the eco-friendly and organic farming

As the sum of organic agricultural and eco-friendly land area reached over 1.5% of the...
agricultural land area in Taiwan, 98.5% farmers still maintain the conventional farming. Because of high cost of the farmlands, expensive certification fee and high technical threshold, appropriate subsidy and incentive could substantially help the farmers. Therefore, in order to attract conventional farmers conversing to do organic farming, around $1,000 USD/ha ecological incentive is given to farmers who are doing the organic farming, eco-friendly farming, or conversion of organic farming. For farmers conversing to organic agriculture, there is also cultivated incentive of $1,000-1,500 USD/ha depends on different crops.

To mitigate the cost of the organic farmers, the government in TW also subsidizes 90% of the certification fee. What's more, when the farmers rent the public land to do organic farming, they will pay only 60% of the original rental price, and get the insurance of the rental period 10 to 20 years. In addition, there are also subsidies of facility, equipment, material, certification fee, and rental are promoted. (see table 2)

| Table 2. Incentives and subsidies on organic agriculture |
|-----------------------------------------------|-----------------------------------------------|
| **Incentives** | **Subsidies** |
| Conventional farming | 1. Facilities(equipment) |
| | (1) Green house and net house. (without priority) |
| | 2. Material |
| | (1) Domestic organic fertilizer |
| | (2) Biological control material |
| Eco-friendly farming | 1. Facilities(equipment) |
| | (1) Green house and net house |
| | (2) Machinery |
| | (3) Processing equipment |
| Conversion to organic agriculture | 2. Material |
| | (1) Domestic organic fertilizer |
| | (2) Biological control material |
| Organic agriculture | 3. Certification fee |
| | 4. Rental insurance and discount |
| | (1) 60% of the original rental fee |
| | (2) Insurance of rental period 10-20 years |

3.2 Policies to reduce adjacent contamination

Due to cultivated lands are small and dense in Taiwan, chemicals and pesticides from conventional farming are easily spread in organic farms. To solve the problem, except continuously integrating the organic farming areas, Council of Agriculture encourages city governments and civil groups to set up “organic agricultural promotion zones”. In these zones, public infrastructure and production-marketing facilities are prior to construct, and farmers are prior to be counsel to do organic farming or eco-friendly farming. Our target is, through the organic agricultural promotion zones, we can not only reduce the adjacent contamination, but also expand the original organic cultivated areas.

In the past, when the organic agricultural products and in-conversion agricultural products tested contain the prohibited substances, under no circumstances were penalties given. However, after the Organic Agricultural Promotion Act promulgated, if operators validating that they have taken necessary precautionary measures, and their fields are identified by the competent authority to be contaminated by adjacent farms, are exempted from penalties.
3.3 Management of accreditation and certification bodies

Third party certification has been practiced in Taiwan for years. The Taiwan Accreditation Foundation (TAF) has been permitted by COA as accreditation body, which is responsible for accrediting certification bodies. Currently, 13 certification bodies are accredited and responsible for certification of the organic products. Once the organic products are certificated, organic mark are stamped (see figure 2). Organic mark was very similar to marks of fine agricultural products. However, for the welfare of the consumer, the organic mark has been renewed (see figure 3). Furthermore, to increase the information transparency, the information of certification bodies, operators, certification status and certification fee are integrated on an internet platform.

Figure 2. Process of the certification of organic products in Taiwan

![Figure 2: Process of certification of organic products in Taiwan](image)

Figure 3. Current organic mark

![Figure 3: Current organic mark](image)

3.4 Counseling marketing and mutual organic equivalence

Counseling production and marketing is the key point to promote organic agriculture. Except raising lectures and conferences to enforce the knowledge of the organic agricultural operators, for domestic markets, we counsel internet platforms, farmers markets, and organic meals for the army and students. For international markets, we practice the mutual organic equivalence.

To promote the domestic market, the government has promoted organic school lunch and meal for the army since 2017. For example, in 2017, 11 cities, 1,264 schools, 780,000 students have eaten 119 tons organic foods per week. In 2018, 18 cities, 2,243 schools, 1,480,000 students have eaten 163 tons organic foods per week, which has increased 37% than 2017.

In 2018, Taiwan imported 12,542 tons of organic products, in which 21% were from United States. But due to the certification and mutual recognition, organic agricultural products in Taiwan have been exported as normal agricultural products. To solve the problem, according to the latest organic agricultural bill, the COA has unilaterally promulgated 22 countries of mutual organic
equivalence, our target is to reach mutual organic equivalence with these countries within 1 year.

4. Enterprise with successful approach-Huixiang Organic Farm

4.1 The Huixiang story

Mrs. Li was a supervisor in an insurance company. As a vegetarian, she started to think of food safety and sustainable agriculture. This idea triggered her to open a natural veggie restaurant in 1994, in which the meal materials are bought from eco-farming households. Few years later, Mrs. Li called 6 young people in action to lead a natural life together, bought lands to do eco-farming, and established Huixiang organic farm in 2005. With the vision of sustainable agriculture, the company operated through six-grade industry, and gradually become a company with 300 workers, 14 organic shops, 9 chain restaurants and having more than 100 organic products.

4.2 The representative of sixth industry

Sixth industry is a combined industry mixed the first agro industries, the secondary manufacturing industries, and the third service industries. In 2007, Huixiang called 40 young people return to their home town and established the cooperative. It was the origin of the sixth industry from the farm to the consumer. The sixth industrial chain of Huixiang became more complete in 2014, when the company constructed its miller, process factory and courier station, which combined cultivation, organic products, a restaurant, and activities of organic farm. To follow the rapid step in the era of internet, the company not only cooperate with various market channels, also established its internet platform oneearth.com.tw, create its own internet brand.

5. Conclusion

As the awareness of food safety and environment protection raised, organic agriculture has become an issue. In 2019, the Organic Agricultural Promotion Act has opened a new era for this industry, which emphasizes on counseling the producers, improving the certification process, and enhancing the marketing. Can the new policy attract farmers to change the farming customs and reach the target of 15,000ha organic agricultural and eco-farming land areas in 2020? Can the mutual equivalence policy open the export market of organic products in Taiwan? It is worth to observe the subsequently development in organic agroindustry in Taiwan under the new policies.
The Current Developments and Policies in organic agriculture in ROC (Taiwan)

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Agriculture in Taiwan
- Geography and climate
- General agriculture

Organic agriculture
- History of OA in Taiwan
- Current statistics
- Policies to OA

Case study - Huixiang organic farm
Taiwan’s Profile
Area: 3.6 million ha
Population: 23.5 million
Agricultural land area (2017): 793,027 ha
Farming households (2017): 775,310
80% < 1 ha; 55% < 0.5 ha
Climate in Taiwan

- **Tropical & subtropical**
- **Summer** 27~30°C / **Winter** 15~22°C
- **Rainfall:** concentrate in summer
- **Typhoon:** 3-5/year

### Agricultural land use (2018)

- **Rice:** 24%
- **Vegetables:** 21%
- **Fruits:** 26%
- **Coarse Grain:** 8%
- **Special Crops:** 3%
- **Flowers:** 2%
- **Forage Crops:** 4%
- **Green Manure Crops:** 2%
- **Mushroom/shiitake:** 10%
- **Mushroom/shiitake:** 2%

#### Agricultural land use categories

- Rice
- Fruits
- Coarse Grain
- Special Crops
- Flowers
- Forage Crops
- Green Manure Crops
- Mushroom/shiitake
Organic agriculture in Taiwan?
Organic Agriculture in Taiwan

Assess the feasibility of organic agriculture
1986

Conferences discussed regulation
1995

OA certification were executed by civil groups
2002

1988 pilot project

1993 seminar of sustainable agriculture

COA promulgated regulations of organic agricultural production and certification
1999

regulations of OA product management
2003

OA was set as main scheme of administration
2009

Organic Agriculture Promotion Act
2019

2007 Agricultural Production and Certification Act

2017 Start promulgating eco-friendly farming

To be continued…
Organic Agriculture in Taiwan


- **FiBL Statistics 2017**
  - 10th of Asia
  - 77th of the world

### Organic Agricultural Land Use (2004-2019)

- **Crops**
  - Rice: 26.7%
  - Vegetable: 29.0%
  - Fruit: 13.6%
  - Tea: 4.4%
  - Others: 25.3%
  - **Total**: 12,650

- **Target**: 1.5% of agricultural land

### Land Use of Organics

- **Certification standard**
- **Certified**
- **Organic mark**
- **Similar to organic**
- **Officially approved group**
- **Registered**

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- **Target**
Organic Agriculture Promotion Act
- Promulgated on May 30th, 2019
- The 1st organic agricultural bill
- Important policies
  - Counsel organic agriculture & prevent adjacent contamination
  - Third-party certification
  - Promote the markets
- Reach 15,000ha in 2020
Counsel eco-friendly farming and OA

- Push farmers to do organic farming
  - Incentives and subsidies
    - Farming cost, certification fee, technical threshold
  - Eco-friendly farming
    - 3 yrs ecological incentive ($1,000)
  - Conversion to OA
    - 3 yrs ecological incentive ($1,000)
    - 3 yrs subsidy for crop ($1,000-$1,500)
  - Organic Agriculture
    - Ecological incentive ($1,000)
Mitigate the cost of organic farming

- **Subsidy of certification fee**
  - 90% off

- **Rental discount**
  - Rental fee - 40% off
  - Insurance of rental period (10 yrs)

- **Subsidies of facilities (equipment)**
  - Greenhouse and net house
  - Agricultural machinery & equipment
  - Process facilities

- **Subsidies of material**
  - Domestic organic fertilizer
  - Biological control material
Organic agricultural promotion zones

- Public infrastructure & production-marketing facilities
- Conventional farmers are counseled to do organics
- Organic agricultural promotion zones
  - Prevent adjacent contamination
  - Expand the original organic cultivated area
Third-party certification

Process of certification

Accreditation body (Taiwan Accreditation Foundation, TAF) → permission

Certification body (13 bodies) → examination

Operater (4,055 bodies) → Certification

Competent authority (Council of Agriculture, COA)

City government

Labeling → Inspection

Organic products
Promote the markets

- Enhance marketing and expand channels
  - Internet platforms, farmers markets, organic meals for army and students.
  - Organic school lunch
    - 2017---1,264 schools
    - 2018---2,243 schools
Open the international market of organic product

- **International market**
  - Imported 12,542 tons (2018) mainly from USA (21%)
  - Exported as normal agricultural products

- **Mutual organic equivalence**
  - 22 countries are unilaterally promulgated
  - Reach mutual organic equivalence in 1 year (30th, May, 2020)
Company name: Huixiang Organic Farm (oneearth.com.tw)

- 1994: Natural veggie restaurant
- 2005: Contract organic farming, Established Huixiang Organic Farm
Enterprise with successful approach

2007 • Establish organic cooperative (Started the sixth industry)

2014 • First organic shop and miller

2017 • Internet platform
Enterprise with successful approach

Sixth industry

Farm ✗ Process ✗ Sale
Enterprise with successful approach

- **Status of the company**
  - 300 workers
  - 14 organic shops
  - 9 chain restaurants
  - 100+ organic products

- **Vision of the company**
  - Organic village
  - Organic processing district
  - Organic school
Conclusion

- **Challenge of OA in Taiwan**
  - High cost
  - Adjacent pollution
  - Technical threshold
  - Marketing

- **Organic Agriculture Promotion Act**
  - Counsel conventional farmers to change
  - Integrate the organic farms
  - Third party certification
  - Enhance the domestic market, open the international market

- **Reach 15,000ha in 2020**
THANK YOU FOR YOUR ATTENTION
References

- Taiwan organic agriculture system (https://epv.afa.gov.tw/)
- Taiwan organic information portal system (https://info.organic.org.tw/)
- FiBL statistics 2017 (https://statistics.fibl.org/)
- Huixiang organic farm (oneearth.com.tw)