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Ways to Enhance the Values of Agricultural Products from GIAHS Sites



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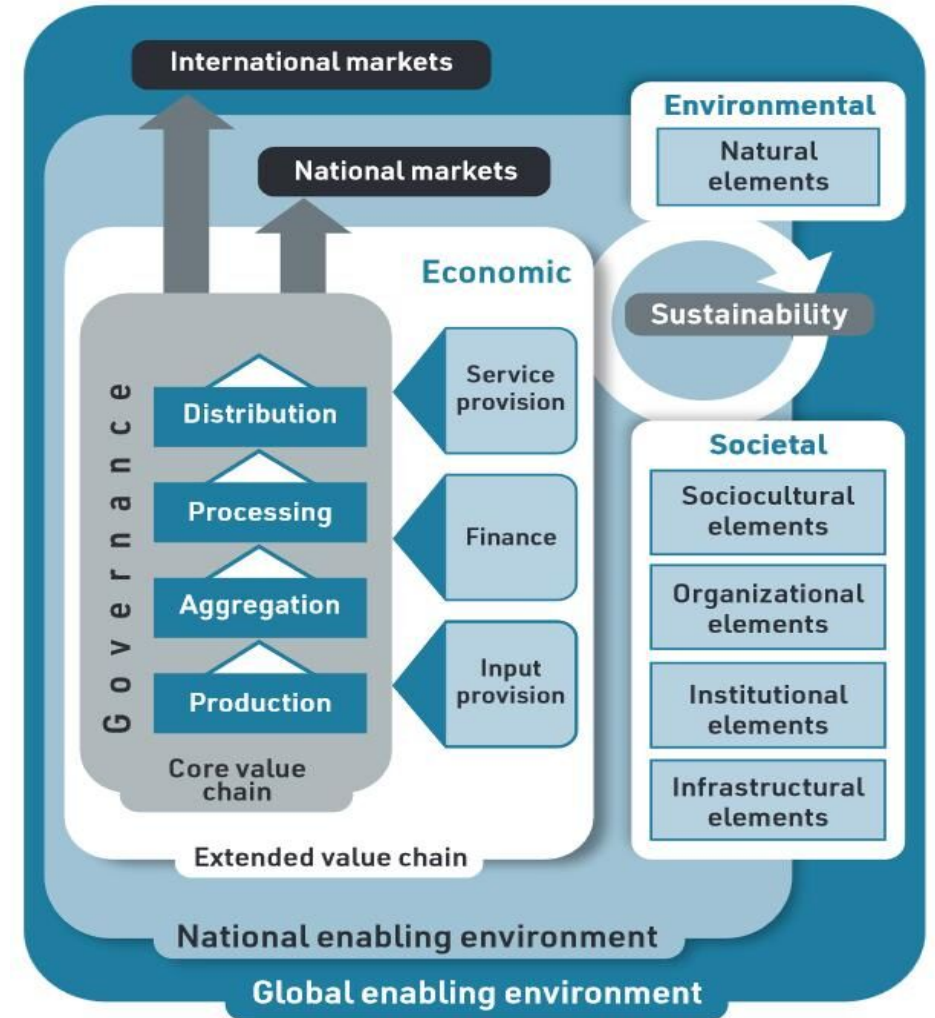
1 Background

- **Climate change and modernization pose challenges for GIAHS conservation**
 - Decreased rainfall, rising temperatures and longer and more frequent dry spells affect rain-fed agricultural production while less but heavier rain events can trigger runoff and increase the risk of flash floods, landslides, and higher soil erosion.
 - While providing advantages like funding, new technologies, and innovative perspectives, modernization also intensifies problems, such as population migration, farmland abandonment, environmental pollution and culture extinction.
- **GIAHS conservation must be conducted in a dynamic way**
 - A series of dynamic conservation approaches have been put forward for GIAHS, such as **payment for ecosystem services, development of value-added agricultural products, development of sustainable tourism, and establishment of industrial integration.**



1 Background

- Value-added agricultural products are important for GIAHS conservation
 - Among these approaches, the development of agricultural products with ecological and cultural added-values might be the most important one as it is most directly linked to the livelihood of local farmers and the development of heritage sites.
 - Few studies systematically conducted research on how to add values to GIAHS agricultural products from production to sales throughout the entire value chain with a full use of marketing methods.

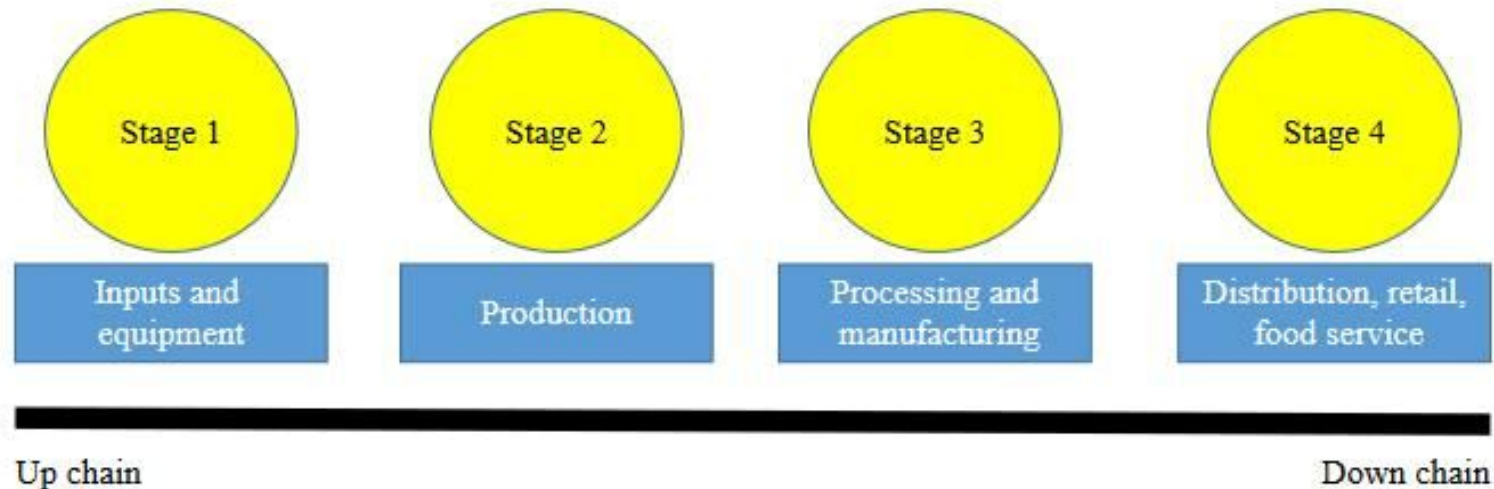


Source: FAO, 2014. Developing sustainable food value chains-Guiding principles. Rome.



1 Background

- **Add values to GIAHS agricultural products: value chain insight**
 - It is of importance to seek **paths for enhancing the values of agricultural products from GIAHS sites**, so as to improve the dynamic conservation of GIAHS and its sustainability for better coping with the challenges brought by climate change and modernization.



Source: Cucagna, M.E., Goldsmith, P.D., 2018. Value adding in the agri-food value chain. *Int. Food Agribus. Manag. Rev.*, 21, 293–316.



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2.1 Concept and connotation

- **Value of agricultural products**

- The value of agricultural products from the perspective of different subjects has different meanings.

For producers, the value refers to **monetary value** of agricultural products. The goal of enhancing this value is to sell them at a higher price and achieve greater profits.



For consumers, the value refers to their **judgement on the quality** of agricultural products, which determines their willingness to pay the corresponding price.



2.1 Concept and connotation

- **Value-adding process for agricultural products**
 - involves a series of practices that **showcase or enhance the quality and values** of these products through various methods at different stages of producing, processing, and marketing, ultimately **encouraging consumers to pay higher prices**.
- **Core values in the value-adding process**
 - There are two core values for achieving added value of agricultural products:

Physical value

which refers to the **tangible attributes** that can be directly perceived by consumers, such as size, color, and taste.



Perceived value

which includes **intrinsic meanings** such as ecological and cultural values, which are not visible in the product.



2.2 Features of GIAHS agricultural products

- **GIAHS agricultural products have advantages in value adding**

➤ Advantages in enhancing the physical and perceived values are closely related to the resource conditions in GIAHS and their sites.

Criteria for GIAHS selection

- Food and Livelihood Security
- Agro-biodiversity
- Local and Traditional Knowledge Systems
- Culture, Value System and Social Organizations
- Landscapes and Seascapes Features



2.2 Features of GIAHS agricultural products

- Features of agricultural products from GIAHS sites

➤ According to the GIAHS selection criteria, the principal features of GIAHS agricultural products are as follows:

(1) Exhibit excellent
physical attributes

(2) Have significant
ecological benefits

(3) Embody rich
agri-culture and wisdom

Criteria for GIAHS selection

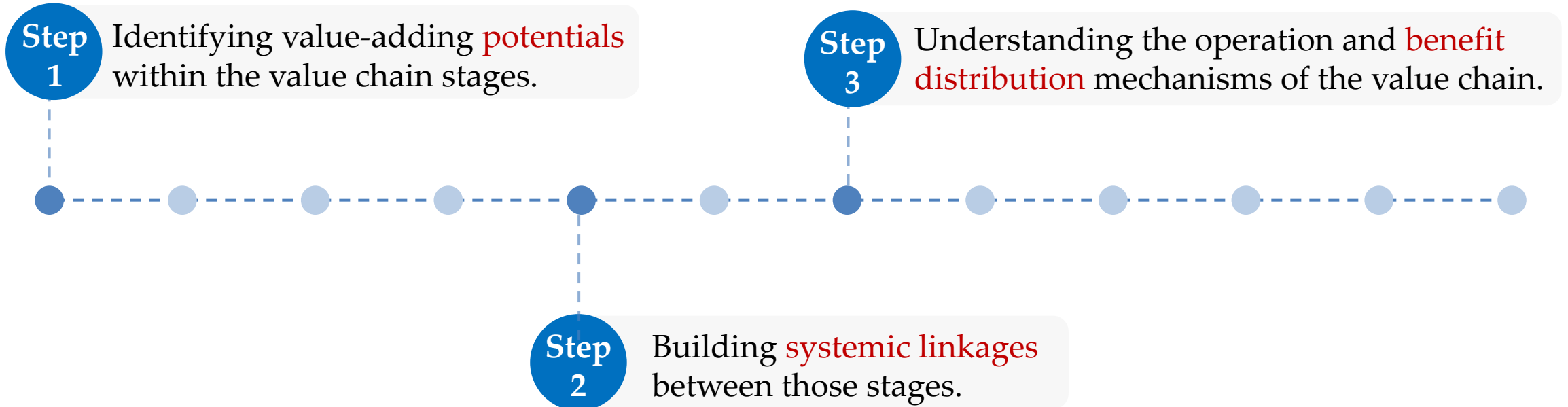
- Food and Livelihood Security
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2.3 Conceptual framework of value adding

- **Theoretical foundation: value chain**

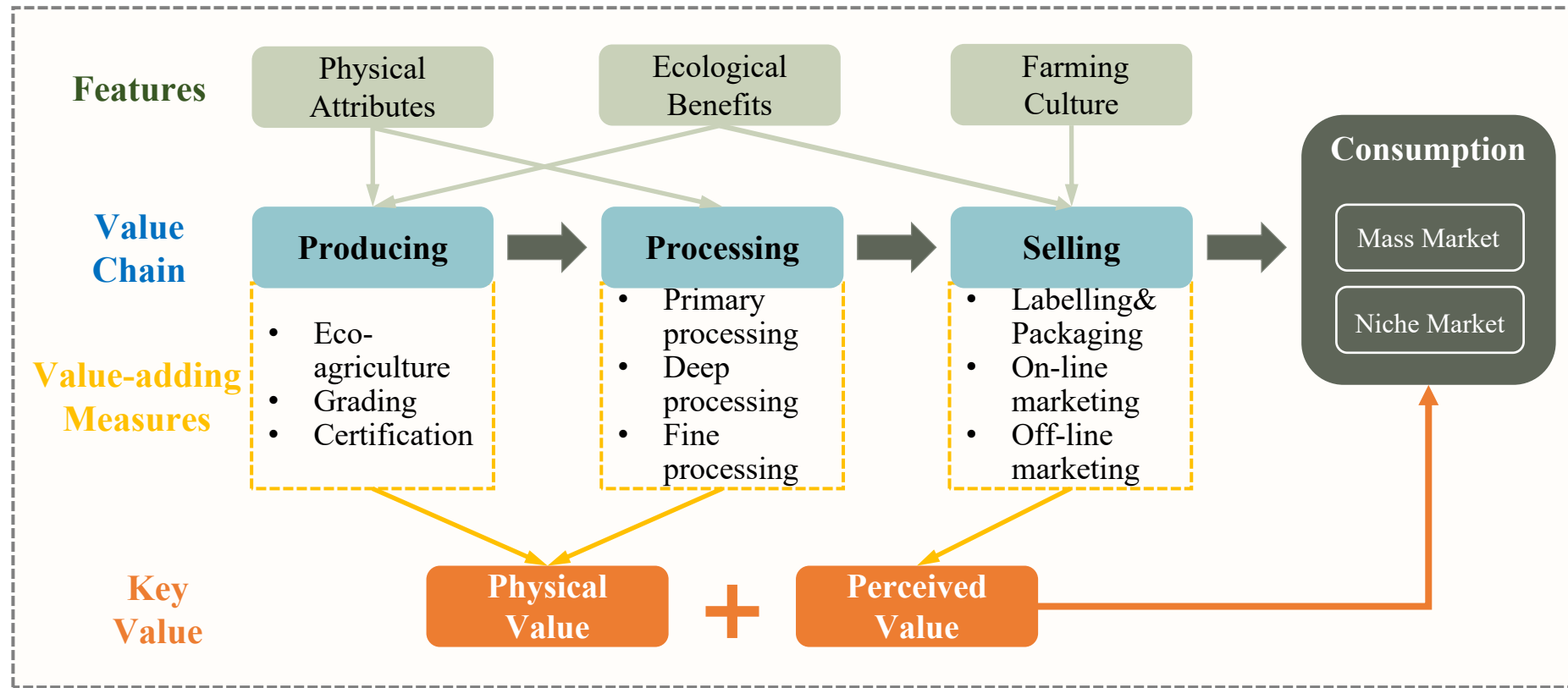
- According to **value chain theory**, business activities, such as R&D, production, sales, transportation, and supporting functions, can be represented by a value chain.
- The **agricultural value chain** encompasses all activities and actors involved in the primary producing, processing, selling and consumption of agricultural products.



2.3 Conceptual framework of value adding

• Conceptual framework

- A complete value chain **from producing to consumption** was established, which helps increase the key values of GIAHS agricultural products by taking different value-adding measures.



Conceptual framework of enhancing the value of agricultural products from GIAHS



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3.1 Aohan Dryland Farming System

- It was designated as GIAHS in 2012, becoming the first dryland farming heritage in the world.
- Aohan is one of the origin areas of the millet and the broomcorn millet and the dryland farming in the north of ancient China.
- The system not only has rich agricultural biodiversity, but also preserves many different kinds of local varieties.
- The system is full of traditional farming skills and wisdom which have been inherited by local people for thousands of years.



Representing one category of GIAHS in China: relatively large-scale agricultural production with relatively large amounts of agricultural products



3.1 Aohan Dryland Farming System

- Aohan has established 107,000 ha of quality coarse grain planting base, including 5,300 ha of organic coarse grain base and 20,000 ha of green coarse grain base.
- There are a total of 16 green products and 15 organic products; Aohan buckwheat and Aohan millet have been certified as GI products.



3.1 Aohan Dryland Farming System

- Aohan has publicized its agricultural products **through various means** such as exhibitions and trade promotions, and **on various media platforms** such as TV, newspapers and the internet.
- Aohan has expanded online sales channels actively. Its agricultural products are commonly found in **off-line supermarkets** in large and middle-sized cities and widely sold in large **online supermarkets**.



3.1 Aohan Dryland Farming System

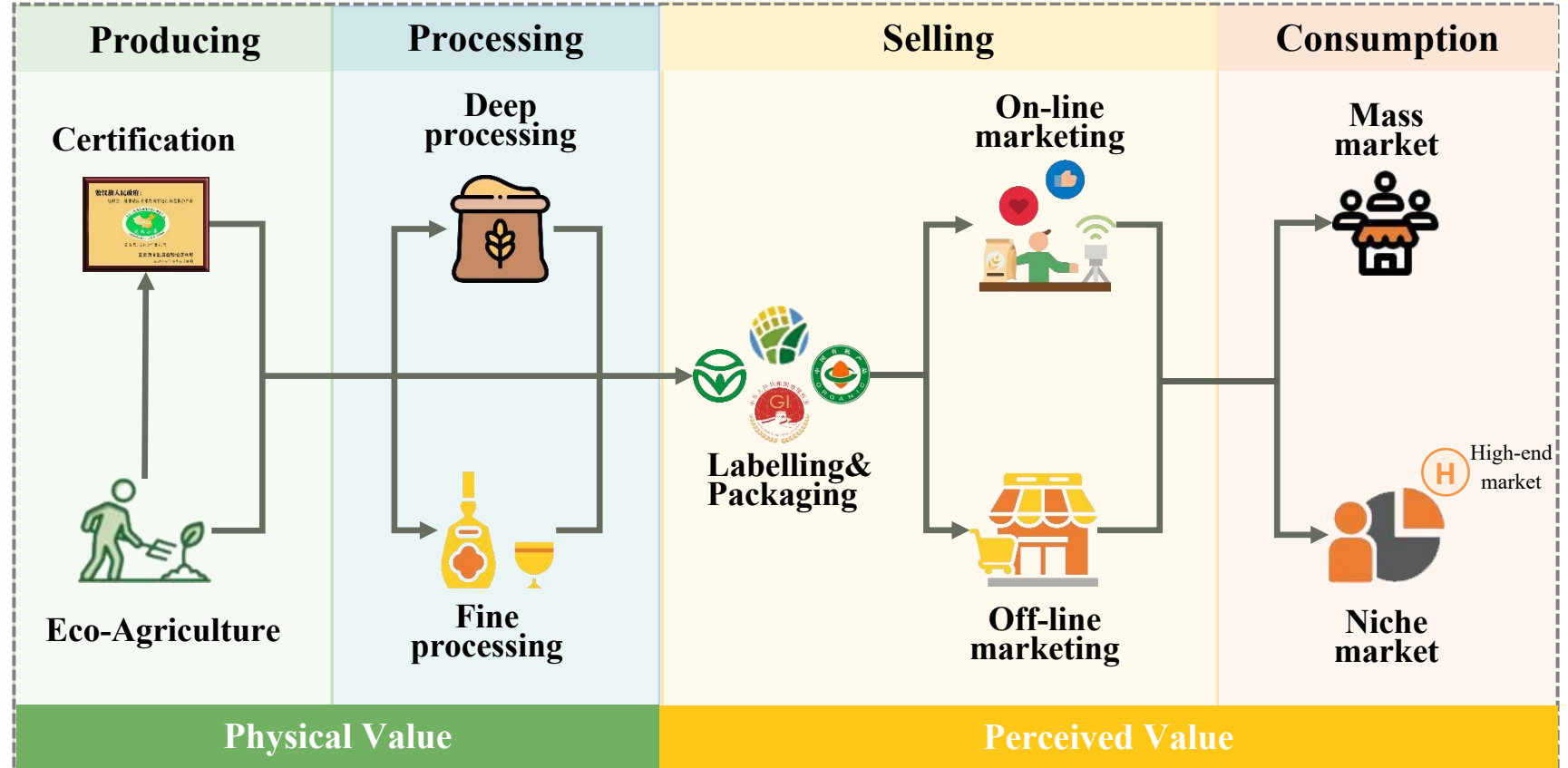
- In addition to the mass market, Aohan has also been cultivating **niche markets** for its agricultural products. For example, Aohan has developed millet products suitable for pregnant and lying-in women.
- Aohan has also been promoting the **integrated development of agriculture and tourism**, such as making agricultural products the best tourist souvenirs and developing a variety of millet dishes for tourists.



3.1 Aohan Dryland Farming System

- Value chain analysis

➤ We proposed a value chain for Aohan agricultural products, identifying key stages and development measures in the value enhancement process, and establishing linkages between these measures.



Value chain for Aohan agricultural products



3.2 Qingtian Rice-Fish Culture System

- It was designated as GIAHS in 2005, becoming the first GIAHS in China.
- The warm and humid climate provides favorable natural conditions for the inheritance and development of rice-fish co-culture, which has lasted for **more than 1,300 years**.
- **The symbiosis between rice and fish** not only makes a high rice yield and fish harvest, but also protects the natural environment and biodiversity of paddy fields, realizing the trinity of economic, social and ecological benefits.



Representing the other category of GIAHS in China: small-scale agricultural production with small amounts of agricultural products



3.2 Qingtian Rice-Fish Culture System

- The rice-fish culture covered an area of 4,000 ha in 2022, with an average yield of 7,200 kg per ha for rice and 442 kg per ha for paddy carp.
- Qingtian has actively promoted the **green and organic production** of rice and paddy carp, created **regional public brands** of "Qingtian Paddy Carp" and "Qingtian Paddy Carp Rice", and increased the values of rice and paddy carp products.
- Qingtian has one green product and 3 organic products. **Qingtian Paddy Carp** was registered as a GI in 2021.



3.2 Qingtian Rice-Fish Culture System

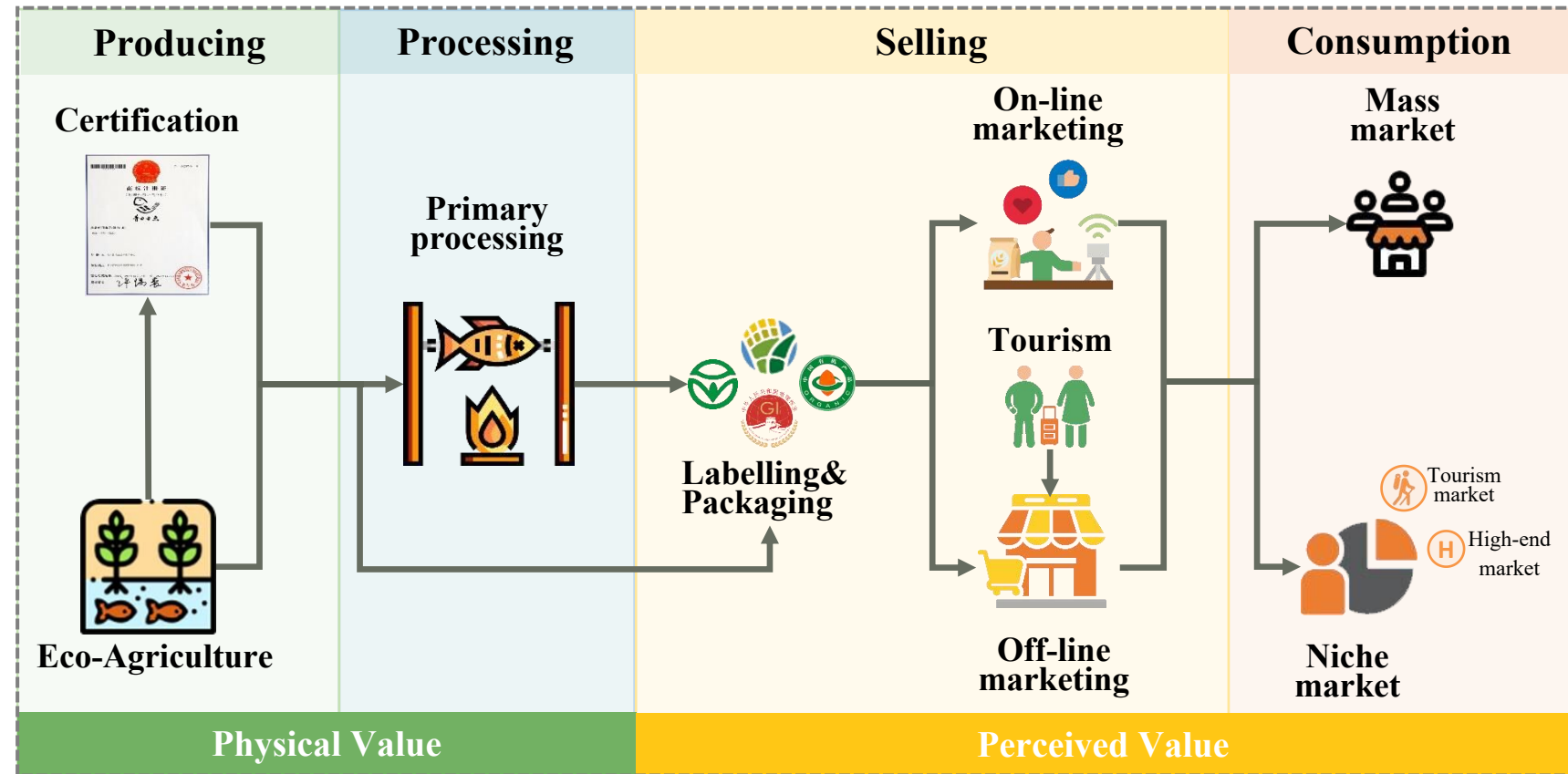
- Qingtian has greatly promoted the **integrated development of agriculture and tourism** by establishing rice-fish culture theme restaurants, home stays and museums. **Local dishes** made of Qingtian paddy carp and local ingredients are very popular among tourists.
- The local enterprises compared the symbiosis relationship to "the love between rice and fish" and developed **a wedding gift package** of Qingtian Paddy Carp Rice.



3.2 Qingtian Rice-Fish Culture System

- Value chain analysis

➤ By analyzing the value-adding potentials the conceptual framework, we found that Qingtian and Aohan follow **different value chain development paths** for their agricultural products.



Value chain for Qingtian agricultural products



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- **Industrial integration**

- The value chain connects the primary, secondary, and tertiary industries, and achieves the development goal of adding values to agricultural products from GIAHS sites through the **integration and interaction of industries**.
- Integrating **eco-agriculture with tourism** helps promote consumer awareness of GIAHS products and motivate consumers to pay higher prices for these products.

- **Labelling**

- Some GIAHS sites are exploring **the con-joint use of multiple logos** for products, such as GI logo + quality logo (e.g. green food, organic food) + heritage logo (e.g. China-NIAHS logo, their own logo) .



4 Discussion

- **E-commerce**

- **Online marketing** has become a pioneering method for GIAHS sites to sell agricultural products.
- Through various online marketing strategies, such as live streaming, the charm of GIAHS agricultural products can be widely recognized by people from various regions.

- **Farmers**

- Due to various factors and conditions, farmers are often at the edge of the value chain, facing problems such as low returns on agricultural products and poor sales channels.
- It is of significance to **understand the role and guarantee the benefits of farmers** in value-added activities on GIAHS agricultural products.



On October 25, 2021, the first rural e-commerce development report was jointly issued by FAO and Zhejiang University of China.



**THANK YOU FOR YOUR
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