



## Research on Value Conversion from Agricultural Products to Creative Products

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# RESEARCH ON VALUE CONVERSION FROM AGRICULTURAL PRODUCTS TO CREATIVE PRODUCTS

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## SECTION

- Visual, Haptic and Urban Design (*Color, Light, Architecture, Landscape, Design for the common good*)
- Technology of Innovative Materials (*Surface design, Multisensory experience, Environment and society*)
- New Frontiers (*Product design, Human society 2.0, Open Innovation*)
- Communication Experiences (*User experience, Virtual learning environment, Identity and otherness*)
- Design for Social Innovation (*Political design, Co-design, Service design, Culture 3.0*)
- Health Science (*Well-being, Design for all, Advance simulation*)

## ABSTRACT

*With the changes in global economic and environmental conditions, agricultural development in countries around the world is facing severe challenges such as rising costs, deteriorating ecological environment, and high resource conditions. Due to the market constraints, agricultural products are difficult to break through the bottleneck. Creative agricultural products use biotechnology to change the physical functions of agricultural products such as shape, color difference and taste, while incorporating cultural elements, guided by art and culture, using scientific technology to combine agricultural products with traditional handicrafts to realize the artistic value transformation of agricultural products.*

## KEYWORDS

*creative products ,agricultural,design,handicrafts*

## Creative industry concept

Creative industry refers to the creativity, skills and talents of creative people, and the creation and promotion of cultural resources by means of high technology. Through the development and application of intellectual property, high value-added products are produced, with industries that create wealth and employment potential. The creative industry is no longer simply shackled by the traditional culture industry of the past. It is an innovative concept that adapts to the new industrial form. The fundamental concept of the creative industry is to promote restructuring and cooperation in different industries and fields through “cross-border”. The creative industry includes content in the fields of design, research and development, manufacturing and other production activities, as well as traditional service industries, also high-tech-related content industries and related to spiritual and psychological service activities such as art, culture, information, leisure and entertainment. It is a new carrier for the integration of urban economy and industry, and is a high-end component of the modern service industry. In the industry form of the overall service industry, the creative industry develops new industrial growth models of art, spirit, knowledge, psychology, leisure, experience and entertainment, fosters a new cultural consumer market, and a new generation of creativity. Consumer groups promote cultural development and economic development, and promote the reform and innovation of social mechanisms by promoting creative development in the whole society. The creative industry is a high-end industry of scientific and cultural. From the perspective of industrial operation mode, the development of creative industries is more dynamic. It is a high-end way of operating the market economy. It relies more on the promotion of the market and consumption itself, while constantly designing, planning, conserving and stimulating the market.

## **The status quo of creative agriculture**

Creative agriculture is an organic combination of creative industries and traditional agriculture. It took the lead in developed countries in the late 1990s and is an important part of the creative industry. As a new industrial mode of agriculture and an important direction of urban agriculture transformation and upgrading, creative agriculture has effectively promoted the transformation of modern agriculture, and has important significance for the optimal allocation of agricultural factors and the expansion of agricultural functions. Creative agriculture in developed countries started earlier and has a certain scale.

### **1) French model**

Creative agriculture in France is a creative agriculture with environmental protection and ecological functions. It mainly focuses on large-scale crops and uses large-scale specialized farm production to gradually reduce small farms. The function of creative agriculture in Paris is not obvious for the function of urban food supply. The various food supplies in Paris are mainly completed by the expressway network extending from all over the country and other countries in Europe. Therefore, creative agriculture in Paris has broken through self-sufficient production, and the ecological function of highlighting agriculture is to use agriculture to separate polluted areas such as highways and factories from residents to create a quiet and clean living environment.

### **2) German model**

German creative agriculture is a creative agriculture that is functional in life and society. The main forms are leisure farms and citizen farms. The public farms use agricultural land in urban areas or suburban areas, and plan to rent them into small blocks for the public to collect rents. The rented citizens can plant flowers, grasses, vegetables and fruit trees on the farmland, so that the citizens can enjoy farming and experience rural life and close to nature.

### **3) Dutch mode**

Creative agriculture in the Netherlands is a creative agriculture based on the function of foreign exchange earning. It is mainly export-oriented agriculture based on horticulture and animal husbandry. With the help of developed facilities and agriculture, the Netherlands intensively produces flowers, vegetables and dairy products, making its per capita agricultural products export top in the world and becoming a model of creative agriculture in the world. The focus of creative agriculture in the Netherlands is the development of facilities, horticultural technology, A creative agricultural production system that integrates horticultural products, agro-ecological tourism functions, and regional division of labor.

### **4) Japanese model**

Japan's creative agriculture development focuses on facility agriculture, processing agriculture, tourism and leisure agriculture, and diversified agriculture. It is a comprehensive function of creative agriculture, focusing on the development of green, environmental, experience, leisure and demonstration functions of agriculture. Japan's creative agriculture is mainly concentrated in the three major metropolitan areas, namely Tokyo Circle, Osaka Circle and Zhongjing Circle. It mainly produces vegetables, fruits, multi-crops and multi-species, mainly providing quality agricultural products and meeting the needs of the green environment.

### **5) American model**

The characteristics of American creative agriculture: a) Emphasis on education and actively improve the creativity of national agriculture. b) Have high-tech production tools and use high technology to build an electronic information network.

### **How does Italy develop creative agriculture?**

As a big country in agricultural development, Italy has higher requirements for the adjustment of the agricultural industry structure and the added value of agricultural products in the current stage. It not only needs to meet the development of today's society, but also must cater to the public's choice of agricultural products. Combining the rich agricultural resources of Italy, the beautiful natural environment, the long history of traditional handicrafts, and the superiority of artistic aesthetic taste, it develops its own characteristic agriculture. Start with creative agricultural products to showcase the country's characteristics

to the world, accelerate the transformation of agricultural values, promote the sustainable development of the ecological environment, and promote economic growth.

### **Creative product design combining agricultural products and crafts**

Cultural and creative products are subordinate to the category of cultural and creative industries. According to the definition of UNESCO, the cultural and creative industries are composed of cultural products, cultural services and intellectual property rights. Cultural and creative products are the products of modern society that express cultural resources in the form of creativity(Yuanpu J.2010).They are also products formed by materializing the concept of spiritual level.This requires designers to find the cultural concepts they contain in tangible and intangible cultures. Planning and designing a draft, and then transforming it into a product of creative and practical value in contemporary life, is itself a product with high added value. These creative products are often rich in specific cultural connotations and symbolic meanings, as well as uniqueness and differentiation. Designers interpret and analyze cultural concepts, or use some contemporary techniques to transform concepts into modern life. Products with certain practical functions; in the process of materializing culture, some traditional cultures will gain new value and connotation meaning and become a cultural symbol. Cultural and creative products are products with physical forms derived from these cultural symbols, which become the specific objects of consumer consumption, and also guide consumers to consume for culture.

The creative agricultural product design is a creative product formed by combining agricultural products with traditional handicrafts. This is part of the cultural and creative industry. The design of creative agricultural products is not limited to cultural and creative design in the traditional sense, but “culture + intellectual creativity + agriculture + technology”. The goal of sustainable development is to combine agricultural products with cultural creativity. And also need to reflect new technologies. Products formed by the deep integration of culture, creativity, agriculture and technology have opened up a new direction for creative industries. It not only promotes the development of regional creative agriculture, but also inherits the characteristics of craftsmanship and becomes a new field of cultural and creative product design.

Wine is a traditional produced in Italy. It is usually for drink, or for making some desserts such as cakes and chocolates. Even developed some health care products, skin care products and so on. A variety of wine festivals or fairs are held for promotion and sales every year . But at this year's wine tasting, surprises were found with wine-wearing accessories. This is a very interesting creative agricultural product design. It combines the technical characteristics of Murano's glass craftsmanship and traditional jewelry craftsmanship to make exquisite glass beads earrings, and then injects the wine into small glass spheres for sealing. Different of wine earrings show different colors, crystal clear in the sun, very beautiful and distinctive. Another case is a designer developed a special materialmade of drying and compressing the lemon sheet,then use it to design the lampshade which exibition at the 83th Florence International Artisan Fair . These are typical creative agriculturalproducts designed. Inspired the development direction of new creative agricultural products design.(Fig. 1, 2).



Fig.1 - wine jewelry (credits: J. Ruan, 2019).

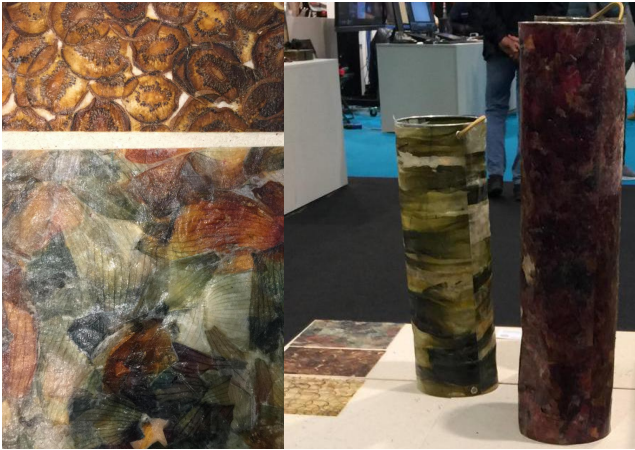


Fig.2 - The lampshade design on the exhibition of 83th Florence International Artisan Fair (credits: J. Ruan, 2019).

## **Creative handicraft agricultural products development trend**

### **1) Design material innovation**

The agricultural product itself is the best ecological raw material, with the characteristics of environmental protection, no pollution, recycling, and low energy consumption. Actively explore and discover the raw materials of agricultural products that can be used. Innovative use of raw materials for existing agricultural products in combination with new technologies. For example, reeds are rich in raw materials and are harmless or even beneficial to the human body. In the rapid development of high technology, reeds are used for making raw materials such as rayon, paper, and quilts because they contain cellulose. And also Bamboo has strong plasticity, short growth cycle, wide range of use, and is also a good raw material for agricultural products.

### **2) Design method innovation**

Cultural and creative products are different from traditional handicrafts and need to be integrated into new forms of creation. They can be new designs, new functions, new materials, and new technologies. When designers are innovating in form and function based on traditional handicrafts, it is not just styling that needs to be considered and explored, because with the changes in styling and function, it is also necessary to have materials and processes that can be adapted. Designers must make new explorations based on mastering traditional techniques.

### **3) Design experience innovation**

Leading the audience to hand-crafted is a deep experience. With the popularity of e-commerce, some unattainable audiences can also receive material packages through various channels to participate in the creative agricultural product design project. In addition to the materials needed for manual experience in the material package, the production tutorial is also essential. For some products with relatively simple production steps, the instructions can be provided directly in the material package; for some relatively complicated manual products. Sometimes it is necessary to provide the user with an e-tutorial or video presentation to enable the consumer to achieve the manual experience after viewing.

### **4) Design brand innovation**

The essence of the brand is to build trust with consumers and realize the value points promised by the brand. Consumers can feel the good experience brought by the brand in every aspect of products, purchase, consumption, service, etc., thus forming trust in the brand.

Creative agricultural products must establish their own brands, use the Internet + technology to manage the brand, and convey the brand concept of creative agricultural products. By building a virtual brand community, we will encourage customers to create brand value through brand community platform and brand operation service personnel and brand stakeholders.

## **Conclusion**

It can be seen that the core brand of agricultural products can be more effectively created. In order to complete the transformation and upgrading of agricultural products more smoothly, it must be combined with the creative industry, which can not only promote the popularity of agricultural products and its economic value. It is more able to drive the joint development of related industries. In addition, combining agricultural products with creative industries can not only improve the effective value of products, but also achieve rational allocation of social resources, thereby generating more added value, improving the economic benefits of agriculture, and making farmers' incomes. At the same time, in the process of combining agricultural products with creative industries, it can also provide more employment opportunities for people, which can greatly improve the employment situation of farmers, promote the coordinated development of regional economy, and produce more competitive creative productions.

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