The project introduced SCP best practice to 9,800 SMEs and involved 1,196 food SMEs in voluntary auditing programmes.
The Challenge

In China, the food industry represents a crucial motor for the development of local economy and society. However, there are serious potential impacts threatening its sustainability, such as a) environmental impacts (water and energy consumption, and emission of highly organic waste water), b) globalisation and change in consumer preferences contributing to the demise of traditional production systems and small companies, c) ethical, health and safe working conditions that are not always ensured (insufficient occupational health and safety measures, limited employment for women and young people, obsolete training programmes), and d) consumer concern regarding product quality.

Objective

The CAPACITY project sought to provide food-sector SMEs in Sichuan, Henan and Qinghai Provinces with the necessary tools to implement sustainable production and consumption (SCP) practices, especially in the meat processing sector. The specific objectives included:

• to assist SMEs to adopt best practice in SCP and comply with international food safety regulations and standards, enhancing their integration into global supply chains and markets;

• to ensure the replication of successful approaches and methodologies by increasing the capacity of business membership organisations (BMOs) and government agencies;

• to promote informed choices for consumers regarding sustainable and eco-efficient produced foods.

Activities / Strategy

The CAPACITY project focused on the Sichuan, Qinghai and Henan Provinces in China. In Henan, food processing represents the second industrial pillar. Qinghai is an important livestock breeding centre and produces large quantities of meat and sausage casings for other parts of the country. In Sichuan, traditional industry, including food and farm by-product processing, is the largest economic sector.

Building the Capacity of Food Supply Chain Actors

The project built the capacity of Chinese food supply chain actors by providing training programmes to SMEs on ‘Design for Sustainability’ and SCP, and engaging them in voluntary auditing programmes. The SMEs were also involved in consultation workshops for local and national food associations on label and international standards, and were given access to new standards management for the Chinese auditing and certification entities. Multi-stakeholder dialogues supported the development of a certification and eco-label scheme, as well as standardisation guidelines.

Creating Public Awareness

Awareness was raised in both food-sector SMEs and consumers. SMEs were informed of the importance of certification, Corporate Social Responsibility (CSR) and eco-label schemes in order to enhance their competitiveness as well as the exportability and market penetration of their products nationally and internationally. Similarly, via the eco-label and certification, consumers were ensured healthy and safe food products coupled with positive social and environmental impacts.

Supporting SCP Policy Implementation

Policymakers and public organisations that promote the implementation of SCP legislation were engaged in project activities. The project partners, the Institute of Quality Standard and Testing Technologies for Agro-Products and the Chinese General Chamber of Commerce, actively engaged in policy dialogues.

TARGET GROUPS

- 600 Chinese food-sector SMEs and industry (processors, packers and distributors/retailers)
- 30 Chinese, Asian and European consumer organisations

Main Beneficiaries

- 50 policymakers from Chinese governmental institutions promoting the implementation of SCP legislation
- 120 business membership organisations
- 240 Chinese auditing and certification entities
Scaling-up Strategy

Design for Sustainability (D4S) Method
The sustainability of 600 food SMEs was improved by implementing the D4S method, which enables the identification and implementation of more sustainable, efficient, eco-friendly and fair processing and distribution systems. The D4S Redesign approach aims at redesigning an existing product to be more sustainable and environmentally friendly.

Framework for Certification and Eco-Label Scheme
During the project, a certification label was developed. This label was awarded to food products that have a less detrimental impact on the environment and society. In designing this new eco-label, the project created a consumer-friendly labelling system that includes information on a product’s sustainability performance. Around 80 pilot SMEs were supported in obtaining the certification and eco-label and their best practice was further disseminated among 9 800 SMEs.

The European-Asian Cluster
The creation of a European-Asian cluster of SCP practitioners promoted the adoption of best practice and business agreements, facilitated further discussion between members and strengthened the relationship between Chinese SMEs and European businesses. Sustainability was ensured through an interactive online platform. Collaboration between practitioners was also promoted through international meetings to match European and Asian SCP excellence in the food sector, represented by different supply chain stakeholders, research centres, technology departments, governmental institutions, etc.

Guideline for Best Manufacturing Practice
During the project, a guideline for the implementation of Best Manufacturing Practice in China’s food processing sector was developed. It included recommendations on key issues such as identification of ‘hot spots’ in the production processes, the best technologies and sustainable management.

Creating an Enabling Policy Environment
The project organised policy dialogues between project partners, associates, target group representatives and local authorities to promote a regulatory framework on sustainability and to enhance understanding of SCP by governmental bodies. A tailor-made training package was provided to policymakers in order to introduce SCP-related concepts and details on their implementation in China.

Building a Pool of Sustainable Food Advisors
Based on the knowhow acquired and using the tools developed during the project, the Sustainable Food Advisor training programme was established. This special massive online open course (MOOC) addressed professionals who contribute, implement and promote new sustainable production and consumption models and certification tools in the Chinese food sector.
Implemented Sustainability Conformity Model and Eco-labelling

During the project, 1 196 Chinese SMEs collaborated in voluntary auditing programmes, 613 of whom were assessed using the Sustainability Conformity Model, which included D4S. (73% of the SMEs scored above average in terms of economic improvement, 90% in terms of social improvement, and 70% in terms of environmental improvements.) A subsequent pilot validation resulted in the certification of 80 SMEs by the project partner IQSTAP (Institute of Quality Standard and Testing Technology for Agro-Products) together with the Chinese Academy of Agricultural Sciences.

Created Assessment Tool and Trained Sustainable Food Advisors

Free access to a software application tool was provided to help food-sector SMEs detect potential improvement areas in their business operations in order to implement SCP approaches. This tool, Sustainability Conformity Model, integrates 37 indexes and 111 dedicated recommendations. The project also developed a training course to create certified ‘Sustainable Food Advisors’ who will assess, evaluate and improve the sustainability status of food companies in China.

Adopted a Women Empowering Strategy

As project lead, GAIA adopted a strategy to include gender-related aspects and empower women at every stage of the project. This included the development of indicators to monitor women’s progress in the research field. Equality was monitored, where data collection and analysis was also disaggregated based on gender. Gender was considered during the development of communication plan and a gender perspective was incorporated into the publication of project results. Institutions and government departments focusing on gender issue were specifically targeted in the project’s dissemination activities.

Improved SMEs’ Working Environment

The project supported the SMEs to improve their working conditions and facilitated the implementation of health and safety risk assessment and its related mitigation measures. Employees of the SMEs were provided with access to training, development and lifelong learning in order to promote a social inclusive, healthy and safe society. CSR concepts were integrated into the Sustainability Conformity Model, and the participating food-sector SMEs assessed their social performance while having access to best practice examples.

The implementation of the Sustainability Conformity Model considered in this CAPACITY project will enable the food SMEs to identify best available techniques, technologies and management practice leading to reduced environmental damage. It will promote a socially inclusive, healthy and safe society through the integration of CSR into the Sustainability Conformity Model, which will improve working conditions in the manufacturing sector.

Mr. Jokin Garatea, Project Coordinator, GAIA
### Impact in Numbers

#### Economic Impact
- The project contributed to a 14% increase in consumption of eco-labelled food products one year after the end of the project, compared to 2012 baseline. In total, 80 food-sector SMEs have received the Sustainability Conformity label.
- Additional business opportunities due to SCP practice include enhanced exportability and market penetration of China’s food products, specifically meat, in global markets.

#### Environmental Impact
- 613 SMEs achieved reduction in water consumption by 5.89%, wastewater discharge by 11.19%, and solid waste generation by 10.17%.
- SMEs helped reduce environmental damage by implementing SCP measures such as:
  - Water-saving techniques: installation of hand cleaning systems with automatic water cuts, installation of electro-valves with detectors in the cleaning showers, refrigeration water recovery;
  - Solid waste reduction techniques: grease recycling, waste sludge recycling;

#### Social Impact
- SMEs reduced health and safety risk by establishing policies to promote employees’ health and safety; assessing potential health and safety risks and implementing mitigation measures; and improving employees’ access to training and lifelong learning.
- The project promoted socially inclusive society through the integration of the CSR concept in the Sustainability Conformity Model.

#### Climate Benefits
- Achieved reduction in energy consumption and related CO₂ emission in SMEs by 13.57%. Measures implemented: higher efficient air conditioners and refrigerators, reducing cold leaks in refrigerators, heat recovery in the cooling plant, etc.
- Increased awareness of climate change risks among the food-sector SMEs through a training session on sustainable food manufacturing.

#### Target group Engagement
- 1,196 food-sector SMEs participated in a voluntary auditing programme; 600 out of these were assessed against the Sustainability Conformity Model criteria, resulting in 80 SMEs obtaining certification.

### Women’s Empowerment
- Involved 1,400 women (29% of total participants) in various project activities and indirectly involved 8,000 women;
- Created 13 new jobs for women;
- The project’s lead partner, GAIA, received an award from the Emakunde (Basque Institute for Women) for its women empowerment activities.

### Policy Development
- Engaged with 39 Chinese, 10 Asian, and 8 European policymakers in 3 roundtables and policy dialogue which resulted in the development of policy recommendations for furthering sustainable development in China’s food industry;
- Submitted a guideline for the implementation of Best Manufacturing Practice for food processing sector. The guideline includes recommendations on key issues: identification of hot spots in production processes, best technologies and management practice to improve environmental performance, and best practice for reporting to key stakeholders.
- Contributed to policy changes on CSR and environmental protection.

### Europe-Asia Cooperation
- Organised an international meeting in Tianjin (2016) to present the Sustainable Food Advisor profile and to match European and Asian excellence in SCP within the food sector;
- Established an online platform, the European-Asian Cluster for SCP practitioners;
- Collaborated with 13 European and Asian initiatives within the framework of sustainable development, which contributed to knowledge transfer where 13 new best practice examples were added to the online platform.
OBJECTIVES

The project aimed at enhancing sustainable performance of production and consumption models in China’s food sector.

DURATION

04/2013 – 06/2016

PROJECT TOTAL BUDGET

EUR 1,563,635.76
(EU contribution: 80%)

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China Society of Commodity Science
China Meat Association

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