

## IMPACT SHEET • SWITCH-ASIA PROJECT SUSTAINABLE PRODUCTION AND CONSUMPTION MODELS AND CERTIFICATION TOOLS IN CHINESE FOOD SUPPLY CHAINS (CAPACITY)

# Greening the food sector in Henan, Qinghai and Sichuan provinces, China



Engaging 600 food SMEs in voluntary auditing programmes and enabling 9800 SMEs to adopt SCP approaches



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## **The Challenge**

In China food industry represents a crucial motor for the development of local economy and the society. However it reports serious impacts threatening its sustainability, such as a) the environmental impacts (water and energy consumptions and emission of highly organic waste water), b) globalisation and changes in consumers' 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) consumers' concern on product quality.

## Objective

The *CAPACITY* project aims to provide food 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 include:

- 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 consumers' informed choices regarding sustainable and eco-efficient produced foods.

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

### **Main Beneficiaries:**

- 50 policy makers from Chinese governmental institutions promoting the implementation of SCP legislation
- 120 Business Membership Organisations (BMOs)
- 240 Chinese auditing and certification entities

## **Activities / Strategy**

The CAPACITY project is focused on the Sichuan, Qinghai and Henan Provinces. In Henan, food processing represents the second industrial pillar. Qinghai is an important livestockbreeding centre and produces large quantities of meat and sausage casings for other parts of the country. In Sichuan, the total industrial value-added of traditional industry, including food and farm by product processing is the largest economic sector. The project has several main activities to achieve its targets:

Building Capacity of Food Supply Chain Actors The project builds the capacity of the Chinese food supply chain actors by providing training programmes to SMEs on Design for Sustainability and SCP, and engaging them in voluntary auditing programme; consultation workshops for local and national food associations on label and international standards; and access to new standards management for the Chinese auditing and certification entities. Multi-stakeholder dialogues will support the development of certification and eco-label scheme, as well as standard guidelines.

### Creating Awareness

The project works to create awareness on both sides of the market: food SMEs of the importance of certification, CSR and eco-label scheme to enhance their competitiveness as well as the exportability and market penetration of their products to national and international markets; and consumers of the eco-label and certifications that ensure a healthy and safe food product as well as its social and environmental impacts.

### **Supporting SCP Policy Implementation**

With the aim of ensuring the integration of sustainable production and consumption patterns and behaviours in China, policymakers and public organisations that promote the implementation of SCP legislation will be engaged in the project. The project partners, the Institute of Quality Standard and Testing Technologies for Agro-Products and the Chinese General Chamber of Commerce, will engage in policy dialogues.



Food processing factory

## Scaling-up Strategy

Design for Sustainability Method (D4S) The project improves the sustainability situation among 600 food SMEs by implementing 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. This process helps customise the SME training programmes suitable for Chinese SMEs.

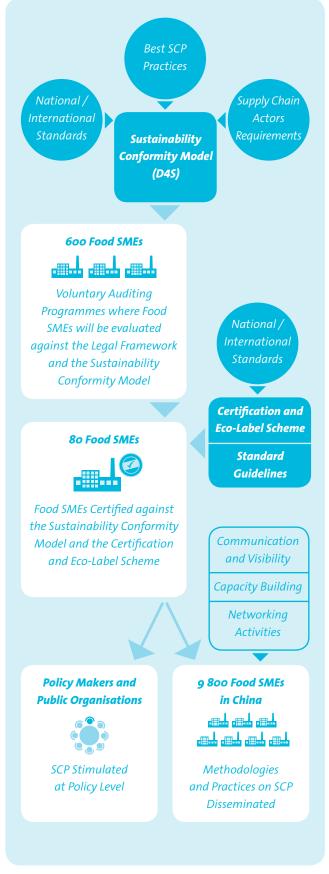
Framework for Certification and Eco-Label Scheme The project develops certification label that will be awarded to specific products with less detrimental impact on the environment and society. Designing the new eco-label, the project creates a consumer-friendly labelling system (e.g. "traffic-light" system) that includes information on product's sustainability performance. About 80 pilot SMEs are supported to obtain the certification and eco-label. Their lessons learnt will be used as case studies and disseminated among 9 800 SMEs.

**European-Asian Cluster** 

The creation of a European-Asian Cluster of SCP practitioners and an online platform, which will promote adoption of best practice and business agreements, facilitate further discussion on sustainability and further strengthen the relationship between Chinese SMEs and European businesses. This collaboration will also be promoted through international meetings to match European and Asian SCP excellence in the food sector, represented by different supply chain stakeholders, research centres, technological departments, governmental institutions, etc. This knowledge transfer and result dissemination will further facilitate replication in other Asian countries.

Guideline for Best Manufacturing Practices A guideline with recommendations for the implementation of Best Manufacturing Practices in China's food processing sector will be developed. The guideline will be distributed to all food processors and relevant stakeholders. It will include recommendations on key issues such identification of weak points in production processes, best technologies, and sustainable management.

Improving Regulatory Framework The project organises policy dialogues involving project partners, associates, target group representatives, and local authorities to promote regulatory framework on sustainability and enhance understanding of SCP by governmental bodies. A tailor-made training will be provided to policymakers to introduce SCP-related concepts and their implementations in China.



CAPACITY project approach

# switchasia

## Results

Environmental Improvements The project identifies hot spots and critical supply chain elements to reduce environmental impacts of the food sector. According to previous studies, the implementation of best techniques, technologies and management can reduce energy consumption by 15%, water consumption by 5%, wastewater discharge by 10%, and solid waste generation by 10%. The percentage of achievement of these environmental benefits will vary, depending on the number and types of SCP practice implemented by individual SME.

### **Better Working Conditions**

The project promotes occupational health and safety (OHS) practice to improve working conditions in 600 food processor SMEs.

### **Improved Sustainability**

The project helps improve the sustainability situation in the food processor SMEs that participate in the Voluntary Auditing Programme, evaluating it against the legal framework and Sustainability Conformity Model. 80 SMEs will be selected for product and process certification and eco-labels designed by the project. The development of a Corporate Sustainability Reporting Scheme is also envisaged. The project will provide the information on environmental impacts of food production and SMEs' sustainable performance to consumer associations and consumers in China, Asia and Europe.

#### **Leveraging Opportunities**

A European-Asian cluster and online platform will strengthen the links between the European and Chinese food industries. New partnerships among food SMEs are foreseen. Around 9 800 SMEs will be engaged in trainings to enable them adopting SCP practices. The project also fosters SCP practice at the policy level.



Workshop training

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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





Meat processing industry



**Quality assurance** 

## **Impact in Numbers**

Economic Impact	<ul> <li>The project will contribute to a 14% increase in consumption of eco-labelled food products one year after the end of the project, compared to 2012 baseline.</li> <li>Additional business opportunities due to SCP practice include enhanced exportability and market penetration of China's food products in global markets.</li> </ul>
Environmental Impact	<ul> <li>The project will contribute to a 5% reduction in water consumption, 10% in wastewater discharge, and 10% solid waste generation in SMEs.</li> <li>The project promotes various watersaving practices among SMEs, such as automatic water control cleaning systems, hand-cleaning systems with automatic water control, and improving cleaning process efficiency with dry methods.</li> </ul>
Social Impact	• The project integrates CSR concept into the Sustainability Conformity Model to improve working conditions for women and young people in the manufacturing sector.
Climate Benefits	• The project estimates a 15% reduction in energy consumption and related CO2 emissions in SMEs, e.g. via optimisation of air conditioning and cold storage temperatures, installation of systems to minimise cold leaks in refrigeration chambers.

### Target group Engagement

- At the end of the project, 600 SMEs, from processors to retailers, will have implemented SCP practice through their participation in the voluntary auditing programme, certification process, and training on Design for Sustainability.
- The project engages at least 60 stakeholders from business membership organisations, consumer organisations, and expert organisations.

• 50 policy makers will participate in the

project workshops, round tables, and

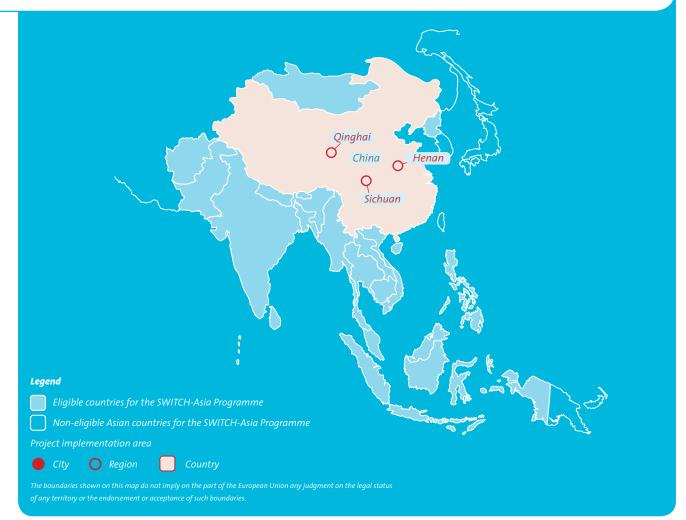
international meetings.

Policy Development

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- Europe-Asia Cooperation
- **Asia**
- The CAPACITY project promotes the creation of European-Asian Cluster for SCP practitioners, an online platform, and will organise an international meeting to match the European and Asian excellence in SCP in the food sector.
- The project will prepare a guideline based providing recommendations for the implementation of Best Manufacturing Practice in China's food processing sector. The guideline will include recommendations on key issues, such as the identification of hot spots in production processes, best technologies and management practice to improve environmental performance, and best practice for reporting to key stakeholders.







#### **OBJECTIVES**

The project aims at enhancing sustainable performance of production and consumption models in China's food



EUR 1 563 635.76



China Agricultural



of Commerce



China General Chamber Chinese Institute of Food Science and Technology

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Association of Industries for Electronic and Information Technologies in the Basque Country (GAIA)



China Society of Commodity Science



Institute of Quality Standard and Testing Technology for Agroproducts, Chinese Academy of Agricultural Sciences



China Meat Association



University

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