Short Term Policy Brief 75

Comparison of the Organic Standard in China and the EU

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Background Briefing: Comparison of the organic standard in China and the EU

All food production in China is subject to the Food Safety Law (2009) 中华人民共和国食品安全法. In addition, three main standards control organic production.

**Chinese standards**

1. **National standard - organic products: GB/T 19630-2011**
   有机产品国家标准
   - Updated version of the original GB / T 19630-2005 standard, this standard was issued by AQSIQ on 5 December 2011 and implemented on 1 March 2012. It comprises four parts: Production, Transformation, Labelling and Marketing and Management System.

2. **Administrative measures for organic product certification**
   有机产品认证管理办法
   - Promulgated by the General Administration of Quality Supervision, Inspection and Quarantine of the PRC (AQSIQ) on 5 November 2004 and implemented from 1 April 2005, these measures form the basis of the regulation of the certification system for organic products.
   - Organic products in these measures are defined as products intended for human or animal consumption, for which the process of production, processing and marketing complies with national standards for organic products.
   - Certification of organic products referred to in these measures requires an evaluation by certification bodies, according to national standards for organic products and the requirements of the measures.

3. **Standards for application of organic product certification**
   有机产品认证实施规则
   - Initially promulgated by the Certification and Accreditation Administration of the People’s Republic of China (CNCA) in June 2005, this regulation defined the essential demands of the certification process as well as the management vis-à-vis certification bodies.
   - In December 2011, CNCA released an updated version of the application for certification of organic products in the Regulation. This has been implemented since 1 March 2012.

**EU Standards**

   - This latest Council Regulation contains clearly defined goals, principles and general rules for organic production.

- This regulation establishes the legal framework for all levels of production, distribution, control and labelling of organic products that may be offered and traded in the EU.

### Inventory of substantial differences and similarities in product coverage

The following categories used to compare substantial differences between EU organic standards with those applied in China have been taken from Annex IV of Regulation (EC) No 1235/2008. In addition, a category for the use of pesticides has been added, as there are substantial differences in the standard between the EU and China.

#### A: Unprocessed plant products

Overall, the Chinese standard for organic products produced from unprocessed plant products is less stringent than that in the EU. The Chinese standard allows for a greater number of unprocessed plant products to be used in fertilizers, soil conditioners and nutrients.

However, the Chinese standard does specify that these products are to be from a natural origin and should not contain synthetic chemical substances nor should have undergone chemical treatment.

Many wood products used for fertilizers, including sawdust, bark and wood ash, have a similar level of control in China as they do in the EU. However, plant ash that is the product of fuel-wood after burning is allowed for fertilizers in China. This is not allowed in the EU.

#### B: Live animals or unprocessed animal products

The Chinese standard concerning live animals or unprocessed animal products is similar to that in the EU in many respects, though these standards are not identical in scope and in specificity.

The Chinese standard allows for wool, fur, hair and dairy products to be used in fertilizers, soil conditioners and nutrients. The standard pertaining to wool and fur is less stringent than in the EU as there are no specific guidelines given to follow. Standards regarding hair and dairy are more stringent than their EU counterparts, though the wording, ‘no addition of any objectionable substances’, means that interpretation could be broad in scope.

Minimum surface areas indoors and outdoors and other characteristics of housing are largely the same between Chinese and EU standards. Some differences are that there are no indoor or outdoor space standards in China for fatting pigs over 110 kilograms and bovine, and equidae over 350 kilograms do not have a specific square meter per 100 kilogram space required while breeding and fattening.
Standards pertaining to poultry are largely similar in China and in the EU though notable differences are prevalent. In China there is no minimum perch length given for laying hens and there is no difference in the minimum indoor space required for guinea fowls while fattening in fixed housing.

In addition, there is no regulation in the Chinese organic standard for the maximum number of animals per ha equivalent to 170 kg N/ha/year.

C: Aquaculture products and seaweeds

Overall, the Chinese standards on organic aquaculture products and seaweeds can be viewed as less stringent than their EU counterparts. There has been no standard created for the production and use of fish or other aquaculture animal species.

The standards surrounding seaweed and seaweed products used for fertilizers, soil conditioners and nutrients are the same in China as in the EU. However, there is no corresponding standard in China regarding the following organic aquaculture products: organic production of salmonids in fresh water, organic production of salmonids in sea water, organic production of cod (Gadus morhua) and other Gadidae, sea bass (Dicentrarchus labrax), sea bream (Sparus aurata), meagre (Argyrosomus regius), turbot (Psetta maxima [= Scophthalmus maximus]), red porgy (Pagrus pagrus [= Sparus pagrus]), red drum (Sciaenops ocellatus) and other Sparidae, and spinefeet (Siganus spp.), organic production of sea bass, sea bream, meagre, mullets (Liza, Mugil) and eel (Anguilla spp.) in earth ponds of tidal areas and costal lagoons, organic production of Sturgeon in fresh water, organic production of fish in inland waters, organic production of penaeid shrimps and freshwater prawns (Macrobrachium spp.), molluscs and echinoderms and tropical fresh water fish.

D: Processed agricultural products for use as feed

Although the standards surrounding vitamins added to feed as nutritional additives are largely the same in China as they are in the EU, there are fewer standards in China that control the use of processed agricultural products for use as feed. In some instances there are no standards that correspond to their EU counterpart and in other instances where the Chinese standards does exist, it is less stringent.

Standards concerning the use of antioxidants in feed for animal nutrition do not exist in China. In addition, emulsifying and stabilising agents, thickeners and gelling agents, such as lecithin, can only be derived from organic raw materials in the EU; in China, these agents have no regulation governing where they can be derived from, meaning that a larger range of materials could be used to derive such agents.

While flavouring compounds can only be extracts from agricultural products in the EU, there is no corresponding Chinese regulation governing where these flavouring compounds can be derived from, meaning that a wider variety of products could be used to derive flavouring compounds used in animal feed.
Noteworthy distinctions made in the Chinese standards are those concerning feed materials from agricultural origin as additives for silage. The Chinese standards are comprehensive and state those additives that can be used and in what quantities.

E: Processed agricultural products for use as food

Standards concerning those agricultural products used for food in China are on the whole less stringent than those in the EU, though it should be noted that there are several instances where the Chinese standards are articulated clearly and in definite terms.

All gums, including locust, guar, Arabic and xanthan, used in China as food additives have clear uses and specified products with which they should be used. This part of the Chinese standards is more stringent than that of the EU. Other additives, such as vegetable carbon and extracts of rosemary, have no corresponding Chinese standards.

Additionally, aids and other products that may be used for the processing of ingredients of agricultural origin from organic production, such as hazelnut shells and rice meal, and processing aids for the production of yeast and yeast products, such as potato starch and vegetable oils, have no corresponding standards in China, so are less stringent than in the EU.

F: Vegetative propagating material and seeds for cultivation

There is no mention of vegetative propagating material and seeds for cultivation within the current Chinese standards for organic products.

G: Pesticides

The products allowed for use in pesticides under Chinese regulation are quite substantially more than in the EU may be an indication the greater pest pressure for Chinese operators.

More than twice the number of products of crop or animal origin is allowed for use in pesticides in China than in the EU. These products include:

- osthole (cnidium fruit extract)
- berberine (extracts from coptis and phellodendron, etc.)
- emodin monomethyl ether (extracts from rheum and giant knotweed, etc.)
- oligosaccharide (chitin)
- natural trapping agent and nematocide (like marigold, maidenhair and mustard oil)
- natural acids (like edible vinegar, wood vinegar and bamboo vinegar)
- fungus polysaccharide (mushroom extracts)
- milk
- bee glue
- plant extracts having repellent action (extracts from garlic, mint, red pepper, wild pepper, lavender, radix bupleuri and mugwort)
Standards regarding micro-organisms’ use for biological pest and disease control, substances to be used in traps and/or dispensers and preparations to be surface-spread between cultivated plants are largely similar between China and the EU.

Those standards regarding other substances from traditional use in organic farming that can be used in pesticides provide another case of less stringent Chinese standards when compared to those in the EU. Of the 26 substances allowed under Chinese regulations, only 14 are allowed in EU states. Moreover, those standards regarding copper salts, such as copper sulfate, cupric hydroxide, copper oxychloride and cupric octoate, have less stringent standards, stating only that they should be used as fungicides and that copper pollution caused by excessive application should be prevented.

**Inventory of substantial differences and similarities in control procedures**

Standards for the accreditation and certification of organic operators in the EU and China are in many respects comparable. China’s new *Standards for application of organic product certification*, implemented since 1 March 2012, are considered among the strictest in the world for organic agriculture.

**Competent authorities**

Similarly to the EU, the central government designates a Competent Authority, namely the Administration of Quality Supervision Inspection and Quarantine (AQSIQ), under which a specialist subsidiary covering certification and accreditation, the Certification and Accreditation Administration of China, is charged to coordinate certification and accreditation across all fields.

The procedures in China for approving control bodies and subsequently for them to certify operators are comparable, if not more stringent than EU procedures.

As with competent authorities in the EU, the Certification and Accreditation Administration of China (CNCA) strictly regulates the certification bodies and sets out procedures for the certification of operators. Certification bodies inspect operators at least once per annum. Further inspections are carried out according to risk. No inspector is allowed to inspect an operator for more than three years in a row.

Random on-site inspections are carried out on at least a further 5 percent of operators based on risk assessment. In the EU 10 percent of operators are subject to random inspection.

Reasons for cancellation, suspension and revocation of certificates are spelled out in more detail in the Chinese than the EU standards. In the EU, with its more decentralised system, these provisions are the responsibility of member states, who are required only to inform the competent authorities of their measures.

In EU regulation, sanctions are to be ‘effective, proportionate and dissuasive’. Implementation is decentralised and left to the responsibility of individual member states. In the Chinese standards, five separate clauses detail the articles that may be infringed and itemise a scale of fines for the infringements.
Traceability

Electronic methods of traceability are widespread for food control mechanisms in China. The organic sector has developed a unique 17 digit traceable label that enables traceability from origin to retail. This new system, in effect since 1 July 2012, seeks to promote confidence in organic products that routinely face scepticism and criticism from the Chinese public.

The 17 digit code ‘115 12 8044 8802 5690’ shown in the pictures below comprises the following elements.

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>115</td>
<td>Code of the certifying body (for domestic bodies, the last three digits of its certification number; for international bodies, 9 plus two Arabic numerals of its approval number)</td>
</tr>
<tr>
<td>12</td>
<td>Year of issue of certification label 2012</td>
</tr>
<tr>
<td>8044 8802 5690</td>
<td>Random code generated by each certification agency to record the quantity of certificates issued by the agency.</td>
</tr>
</tbody>
</table>
Traceability in action

Illustration of 17 digit code that consumers can reveal by scratching the label. They can then enter the number into an online portal (below) to trace the product’s certification and production details.

<table>
<thead>
<tr>
<th>Certification No.</th>
<th>Authentication Type</th>
<th>Organic Certification</th>
</tr>
</thead>
<tbody>
<tr>
<td>1150A130030</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Certified Product Name: Cucumber
Product packaging specifications: 320 grams
Name of certification body: Beijing Continental Hengtong Certification Co., Ltd.
Certified production company name: Beijing Tian An Agricultural Development Co., Ltd.

Note: If in doubt, please contact the Certification Body Beijing Continental Hengtong Certification Co., Ltd. (Tel: 010-63180481) Contact verified or call 12365,12315 reports and complaints.
Challenges for organic standards in China

The quality of organic produce and the integrity of organic farming cannot be separated from China’s environmental challenges—an inevitable side effect of rapid industrialisation and decades of double-digit growth.

Much organic production is carried out in highly industrialised provinces and in the areas surrounding large metropolitan cities. Soil, air and water quality are often seriously compromised in these areas, presenting intractable problems. Water and soil contamination form a vicious cycle. Contaminants removed from water end up in the soil and vice versa. A government study reported that 90 percent of China’s groundwater is polluted. Another official estimate is that soil is contaminated on 1/6th of arable land is.1 It is now difficult to guarantee that any agricultural production will be free from pesticides and residues carried in irrigation water.

The greater number of permitted pesticides in China’s standard is indicative of the greater pest pressure faced by the Chinese industry compared with operators in EU countries. Space pressures also mean that organic and conventional farms are in close proximity and contamination from conventional farming is ever present. Buffer strips and physical barriers are difficult to implement.

Consumer evaluation of supervision and control systems in China

Chinese language reports on the effectiveness of organic controls systems reveal consumer perceptions and shed useful light on the likely equivalence with European standards.

Issues in the sector have been raised for many years. A 2009 report focused on anomalies in organic food certification, including the existence of unqualified ‘agents’ of the (then) 27 legitimate certifying agencies.2 Issues included use of organic certification after registration had expired. Deeper questioning of organic food production comes from the Chinese Academy of Science (CAS). A 2010 report in the CAS Science News was entitled ‘Lifting the lid on China’s ‘organic food’ scam.’3 Other scientific analysis is available online.4

Responding to these issues in the Chinese press authorities have increased controls, most recently with the introduction of the 17-digit traceability system. But problems appear far...

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2 Zhao Yihai, ‘Youji shipin renzheng shani juxia’ [Murky organic food certification all comes out in the wash], Nanfang Zhoumo, 29 October 2009 (link).
3 Xu Zhiguo and Li Shufeng, ‘Zhongguo ‘youji shipin’ da bianju xiemi’ [Lifting the lid on China’s ‘organic food’ scams], Kexue xinwen [Science News] (link).
4 ‘Zhongguo youji shi[in biaozhun yu shijie zhuyao guojia de qubie’ [Differences between China’s major world countries’ organic food standards], Journal of Peking University, 11 January 2011 (link).
from resolved—they may be growing in intensity. It has been reported that a new ‘major review’ (da ducha) was planned for July 2013, i.e., as this report is being compiled.⁵

**Are EU and Chinese standards and control systems for organic products equivalent?**

A review of EU and Chinese standards and control systems show they have broad equivalency. Where they differ, for example in the use of pesticides, this reflects differing environmental conditions in China. There are a number of instances where Chinese standards are not as stringent as EU ones, but this does not detract from overall equivalency.

A more fundamental difference, however, lies in their implementation and the governance framework on which the measures rest.

EU food system regulations set down the broad framework for the food industry. Government is mindful it cannot regulate and control the industry without active and committed cooperation from operators and producers. Operator/producer responsibility has therefore been developed as an important pillar and an integral element of EU food law. In the Chinese system authority remains vested in government. Although the concept of operator/producer responsibility was introduced in the new Food Safety Law of 2009, it is a challenging concept to popularise in a system of centralised responsibility. It falls to detailed bureaucratic processes, supported by sanction and punishment, to impose compliance.

These detailed bureaucratic processes, requiring large amounts of red tape and paperwork may however be counter-productive. Rather than ensuring effective control, such processes can encourage players to expect certification requirements to be too difficult to attain, and thus to seek other ways to fulfil requirements. The need to make additional payments and other contributions to facilitate the business of registrations and approvals is understood as part of the process in many sectors. This can undermine the integrity of the system.

Although EU and Chinese organic standards may be said to be broadly equivalent on paper, this may not be supported by a more detailed on-the-ground investigation of the industry.

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⁵ Chen Qingsong (see fn. 1); and ‘Youji shipin shichang luanxiang congsheng, ping: ‘gao menlin’ gengxu ‘yan guanli’’ [Organic food market chaotic, comment: high threshold needs ‘even stricter administration’], CCRI Net, 31 May 2013 [：‘有机食品市场乱象丛生 评：‘高门槛’更需‘严管理’”，中广网，2013 年 5 月 31 日](link).