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Policy Brief

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Implementation of an Integrity Platform for Organic Products in Central Asia

Gerald A. Herrmann, Peter Urban

Key message

The integrity and credibility of organic products are crucial for consumer confidence and the further development of the sector. Fraud jeopardizes this trust and causes economic damage. To effectively ensure the integrity of organic products along Central Asia's supply chains and to prevent fraud, the implementation of a digital integrity platform that links certification, transaction and geospatial data is essential. Such a system creates transparency and traceability in the trade of organic products and other products with quality claims, e.g., with a geographic indication of origin.

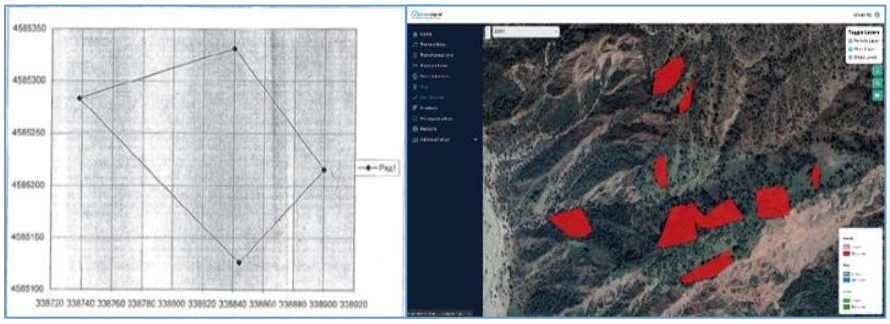
What is the issue?

The existing organic inspection and certification system has weaknesses, particularly in the digital recording and linking of relevant data along the product chain. The lack of mandatory digital recording of parcel size, crop, yield, and sales volumes makes traceability and mass balancing difficult. This encourages fraud, particularly in the case of agricultural raw materials, whether grown or collected. Although organic regulations e.g., EU Organic and USDA National Organic Program (NOP), contain approaches for recording digital data, these relate to general data on operators and their certification, such as TRACES (EU certificate platform) and NOP Organic Integrity Database (OID) for company and import certificates, there is a lack of standardized interfaces and the integration of all relevant data.

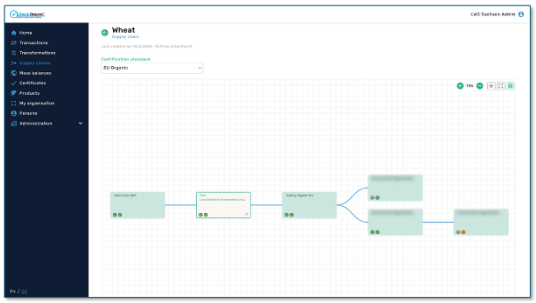
Research approach

Through the implementation of Group Integrity, a software for the management and documentation of Internal Control Systems (ICS) of grower/collector groups, a system defined by organic regulations, data of group members were collected and the inspection and certification of a grower group conducted.

Geographic data (shape files) of group members provided by the Forest Service under the Ministry of Emergency Situations of the Kyrgyz Republic were processed and uploaded to Check Organic-GIS.



Check Organic is a supply chain system that processes parcel, crop, and yield data for managing transactions of certified products for verifying traded quantities (mass balancing). A geographic information system (GIS) integrated with Check Organic enables verifying the location and size of parcels and additional information such as crops grown. Transactions of products from members of



the group, respectively the grower group, to domestic and international buyers can be recorded and thus a seamless supply chain be established and displayed for users of the system, and finally the integrity of certified organic products from farm to table be proven.

Key findings

The integrity platform Check Organic-GIS as a solution

An integrity platform for organic products combines data from various sources to enable end-to-end transparency and control along the supply chain. Specifically, this means linking:

- Certification data: Information from certification management systems (such as Ecert Basic, Intact Platform, and Group Integrity) that documents the certification status of operations and products.
- Geographical Information System (GIS) data: Data on the location and size of cultivation areas, integrated in systems such as Check Organic. GIS data, ideally from public systems, enables the plausibility check of crop volumes based on certified areas and potential yields.
- Transaction data: Quantity information on traded agricultural commodities and products, recorded in a mass balancing system. This enables the comparison of input and output quantities at farm and supply chain level. Check Organic visualizes supply chains and mass balances and uses a traffic light system to indicate certification and integrity status.

By integrating these data streams, such a platform can significantly improve the integrity of organic products by detecting and preventing fraud.

Policy recommendations

To successfully promote the implementation of an integrity platform for organic products in Central Asia, the following measures are recommended:

- Establish a clear legal framework: Establish and implement organic regulations. Clarify the legal categorization of agricultural data (personal vs. non-personal) to facilitate data sharing. Examine possibilities for the mandatory introduction of mass balance systems along the supply chain through legal regulations.
- Promote digital data infrastructure: Support the digital collection of certification data and the provision of open and standardized interfaces to relevant public and private database systems (e.g., certification databases). Include the concerns of organic certification explicitly in digitization strategies.
- Improve yield data collection: Implement systematic procedures for collecting organic yield data, e.g., by integrating it into national surveys or using geo-referenced data from mass balance systems and remote sensing.
- Support the introduction of digital tools: Promote the introduction and use of digital ICS management systems and mass balance systems among groups and companies, where appropriate through financial incentives or the creation of simple access options.

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Contact
Gerald A. Herrmann
Organic Services GmbH
g.herrmann@organic-services.com
www.organic-services.com

Source of photos: Organic Services GmbH