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Navigating Challenges in Indian Organic Certification for a Sustainable Future

**Organic Farming Study in India as part of the Agri-Business Expertise Exchange
of the Indo-German Cooperation on Agricultural Market Development (AMD)
Project**

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Executive Summary

India and Germany have a longstanding market for operators engaged in organic production. With a growing consumer preference for food from sustainable sources, food safety and willingness to pay more for such products, the demand for organic products have been increasing in both the countries. As per the latest reports, 4.7 million hectares and 1.9 million hectares of agricultural areas is under Organic certification in India and Germany respectively. In India, the National Programme for Organic Production (NPOP) has been instrumental in establishing standards for organic production systems, criteria, and procedures for accrediting Certification Bodies. It also oversees the National (India Organic) Logo and the regulations governing its usage. In Germany, the first EU regulation on organic production and labelling of organic products came into effect in 1991, initially applying only to crop products and their food derivatives. The most recent EU legislation, Regulation (EU) 2018/848, which came into effect in 2022, is complemented by several additional regulations containing detailed rules.

In order to gain a comprehensive understanding of the organic certification system in India and Germany, the Indo German Agricultural Market Development (AMD) Project commissioned a study. The study conducted a comparative analysis to contemplate the two countries organic certification system on broad thematic areas and topics. In addition recommendations were developed concerning the enhancement of the control and certification system, as well as strategies for addressing emerging issues and challenges.

In India, the regulation - Food Safety and Standards (Organic Foods) Regulations, 2017 (13), formulated under the Food Safety and Standards Act, 2006 (34 of 2006) recognises that the organic food offered or promoted for sale shall comply with all the applicable provisions of one of the following systems, namely:

- National Programme for Organic Production (NPOP) also known as Third Party Certification (TPC)
- Participatory Guarantee System for India (PGS-India)
- Any other system or standards as may be notified by the Food Authority from time to time

Both the programmes (NPOP and PGS-India) are thus officially recognised and operationally independent of each other such that the products certified under one system cannot be processed or labeled under another system. The control and certification system in India regarding the domestic market is operationalized under the National Centre for Organic Farming as a nodal organization for promotion of organic farming under INM Division, Department of Agriculture & Farmers Welfare, Ministry of Agriculture & Farmers Welfare, Government of India. The control and certification system for export markets is under the frame of NPOP standards where the Agricultural and Processed Food Products Export Development Authority (APEDA), under the Ministry of Commerce and Industries, Government of India functions as the Secretariat for the implementation of NPOP. Private standards for organic certifications are not allowed and recognized in India.

In Germany, the most recent EU legislation, Regulation (EU) 2018/848, complemented by several additional regulations containing detailed rules and these regulations are binding to all the Member States. Where necessary, these EU regulations are supplemented by national law to further strengthen the overall certification system. Under EU legislation, competent authorities in member states of the European Union are tasked with organizing official controls and other related activities. These authorities have the discretion to delegate some or all of their responsibilities to control authorities. In contrast, control bodies are legal entities to which competent authorities have delegated specific control tasks or other official duties. Organic associations in Germany also have their own standards. Adherence to both EU regulations and the association's specific requirements

for managing the entire holding is typically mandatory. This requirement is commonly shared among all organic associations.

The study highlights that challenges in organic production are nuanced, influenced not only by regional and climatic factors in India but also by whether products are destined for the domestic market or export. The subsequent paragraph identified some of the key challenges and recommendation for strengthening the Indian organic certification system.

The development of the organic market is closely tied to consumer confidence. The survey of consumers of organic products in Europe, for example, revealed that they are particularly concerned about environmental impact, GMOs, and pesticide use, underscoring the importance of aligning strategies with consumer expectations. **A key focus for ensuring the Indian organic market's growth lies in minimizing contamination** of organic products by unauthorized substances. In cases of contamination of organic products swift identification and mitigation measures for maintaining market credibility are crucial. Traceability emerges as a critical aspect, essential for upholding consumer trust. **Enhancing traceability** could be achieved by mandating direct bank transfers for transactions within the organic market, thereby curbing fraudulent practices and ensuring product integrity. Further, mass balance and traceability checks are fundamental elements of controls. Therefore, **training staff working in control bodies or authorities on how to conduct these checks** should be an integral part of their training program.

Fraudulent activities are only one factor among others, which contribute to products being falsely labelled as organic. Several cases have illustrated that non-compliances often stem from unintentional actions by operators and their staff, or from deficiencies in their quality systems. **Addressing such non-compliances requires investment in training programs** and providing free guidelines for implementing adequate quality assurance measures in organic production. Additionally, **demonstration farms or parks serve as effective instruments** for showcasing best practices in organic farming. Increasing the number of these demonstration sites can also be a valuable strategy for imparting new skills related to organic production to farmers.

In India as well as in Germany there are several different institutions involved in the control and certification system for organic production. **Collaboration among the various institutions involved in the control and certification systems** is paramount. Non-compliance issues that could undermine the integrity of the organic market can be resolved swiftly, if a good system has been established for exchanging the information required to resolve such cases.

To ensure quality of analysis of organic products on contamination by non-authorized substances, both, **Indian and German laboratories are accredited, based on the same international standard**. However, Indian analysis results, which show no contamination are not accepted in cases, when a second analyse conducted in EU show contamination. This report also shows strategies to **increase the acceptance of analysis of Indian laboratories**. Further, to ensure a fair competition in the organic market and to maintain confidence of the consumer in organic products, **a common risk assessment procedure to be applied by every control body** on the basis of the same elements can also foster transparency, consistency, and effectiveness.

This report highlights the disparity in awareness regarding organic products between Germany and India. Furthermore, while private labelling on organic products is permitted in Germany, it is not allowed in India. Regardless of this disparity in regulations, effective marketing strategies are essential for the **successful utilization of private labels**.

Awareness regarding organic product is significantly higher in Germany compared to India. In Germany, the government has implemented various strategies to enhance this awareness, which

could potentially be adopted by the Indian government to stimulate the growth of the organic market.

Further, Indian organic system can **focus on utilization of artificial intelligence (AI)** that can significantly aid India in reducing non-compliances and fraud related to organic production. AI can be used for data analysis, predictive analytics, supply chain monitoring, image recognition, risk assessment, and real-time monitoring. By leveraging AI technologies in these ways, India can strengthen its oversight of organic production, enhance consumer confidence in organic products, and mitigate the risks associated with non-compliance and fraud in the organic sector.

Finally, this report recommends that with the shift in international regulations from the equivalence model to the compliance model, it is crucial to **facilitate a smooth transition from the PGS India to the NPOP system.**

Background

In India, the National Programme for Organic Production (NPOP) has been instrumental in establishing standards for organic production systems, criteria, and procedures for accrediting Certification Bodies. It also oversees the National (India Organic) Logo and the regulations governing its usage. Launched in 2001, NPOP laid the foundation for the systematic development of the organic agriculture sector in the country. Managed by the Agricultural and Processed Food Products Export Development Authority (APEDA), it focuses on the production and export of various products such as herbs, spices, cumin, coriander, ginger, turmeric, and mangoes.

In Germany, the first EU regulation on organic production and labelling of organic products came into effect in 1991, initially applying only to crop products and their food derivatives. This was because principles and production rules for animals and animal products were still under development. These principles and rules were subsequently implemented in 1999. The regulations were replaced by a new regulation in 2009, which in turn was superseded by Regulation (EU) 2018/848, effective since the beginning of 2022.

Objectives of the Study

Objective of the study is to evaluate the present status of organic farming in India, examining the regulatory framework, certification prerequisites, procedures, challenges, and providing recommendations to enhance the certification process, thereby safeguarding the integrity of India's organic products.

Method and Strategy

The study primarily conducted a desktop analysis to evaluate the present status of the organic farming in India and in Germany leveraging the available resources. Additionally, representative interviews were conducted with various stakeholders across the organic value chain in India to gain insights on the current and emerging challenges.

In order to gain a comprehensive understanding of the Organic certification system in Germany, the following steps were undertaken:

- description of the overall situation, the requirements to be met on the organic market and that are applied by EU legislation and National Law and of the trends and key challenges,
- subsidies being paid to operators with organic production,
- explanation of the control and certification system and the role of authorities and private control bodies in Germany and EU,
- questions and challenges regarding the import of organic products,
- tools to be used in control and certifications system to maintain a high standard of control and certification and to develop it.

Later, a comparative analysis was conducted between the Indian organic certification systems and German organic certification system. The comparative analysis primary endeavoured to contemplate the two countries organic certification system on broad thematic areas and topics. Following this, recommendations were developed concerning the enhancement of the control and certification system, as well as strategies for addressing emerging issues and challenges.

In the subsequent phase, it is planed that the findings of the study would be shared with Indian project stakeholders through dialogue between the German and Indian experts. The technical

dialogue would lead to the identification of the latest primary challenges, facilitating a comparative examination of India's control and certification system against that of Germany.

Overall Situation

Agriculture in India



Agriculture, with its allied sectors, is the largest source of livelihoods in India. 70 percent of its rural households still depend primarily on agriculture for their livelihood, with 82 percent of farmers being small and marginal (1). Even though the agriculture sector is one of the most important industries in the Indian economy, in the budget 2024, the Ministry of Agriculture accounts for only 2.8 % of the total union budget allocation (2).

From the Situation Assessment Survey (SAS) of Agricultural Households, Land and Livestock Holdings of Households in Rural India, the average monthly income of farming households was INR 10,084 (approximate EU 111) in crop year 2018-2019 (3). Crop failure, water unavailability, financial indebtedness, unemployment, and broader governmental policies, are few of the major factors that cause small farmers to move to urban areas in search of non-agricultural jobs and a steady income, even leading to suicides in certain cases. Various state and national governments and non-governmental organizations are promoting organic farming on a large scale to reduce the investment cost and achieve good yield avoiding farmers falling into debt traps and prevent them from committing suicides.

Amidst the onset of the global COVID-19 pandemic, India experienced a phenomenon of reverse migration. The return of labourers to rural areas and the subsequent closure of urban workspaces

had a beneficial effect on the agricultural sector. This influx of migrants back to their hometowns provided a significant boost to many rural farm enterprises and start-ups. Utilizing digital tools for marketing and growing awareness about healthy safe food enabled enterprising farmers to innovate new models aimed at enhancing the sustainability of farming practices. Organic farming emerged as a prominent alternative, offering prospects of financial viability for livelihoods in the agricultural sector.

Cropping seasons in India

Like many large tropical countries, India is characterized by a complex mosaic of distinct agro-ecosystems, differentiated by their climatic, soil, geological, vegetational, and other natural features. Each of these agro-ecological zones is in turn comprised of myriad micro-habitats. It is within this diversity of habitats that an amazing variety of crops and livestock has been developed over the millennia of Indian farming. Though India has a vast diversity of crops traditionally, the major crops today are classified into food crops and cash crops. Food crops include Rice, Wheat, Spices, Millets, Maize, Pulses, Fruits and Vegetables while cash crops include Sugarcane, Oilseeds, Horticulture crops, Tea, Coffee, Rubber, Soyabean, Cotton, and Jute.

Various crops are cultivated in three main cropping seasons which are Rabi, Kharif, and Zaid depending on the different state in India. The Kharif season starts with the southwest monsoon rains (Sown: June-July) and supports the cultivation of tropical crops. Rabi season is for winter crops (Sown: Oct – Dec) as these crops require less amount of water for growth. Zaid season comes between Rabi and Kharif.

The Organic Production and the Organic Market in Germany

Organic Market and Organic Production in Germany



Mainly due to a growing demand for organic food in Germany the organic production has increased significantly in the last decades. Additionally, customers who purchase organic products often place importance on their regional origin.

Some of the main organic products produced in Germany include dairy Products like organic milk, cheese, yogurt, and other dairy products. The country has a significant number of organic dairy farms. Organic fruits and vegetables are grown in various regions of Germany. Common organic crops include apples, strawberries, carrots, potatoes, lettuce, and tomatoes. Organic meat and poultry production is also significant in Germany. Organic beef, pork, chicken, and turkey are produced on farms across the country. Germany has a substantial organic egg production sector, with many farms specializing in organic egg production. Organic grains such as wheat, rye, oats, and barley are grown in Germany for the production of organic bread, cereals, and other baked goods. Germany has a growing organic wine industry, with vineyards producing organic grapes for the production of organic wine. Additionally, organic beer brewed from organic hops and barley is also produced in the country. Other organic products produced in Germany are honey produced by beekeepers across Germany and processed foods, including baby food, canned goods, snacks, and frozen meals.

While the import of some organic products plays an important role for the German market, the export of organic products from Germany is practically insignificant.

Which Organic Products are Imported to Germany?

One of the most important products imported in Germany is organic coffee from various countries around the world, including Brazil, Colombia, Ethiopia, and Peru to meet domestic demand. Organic fruits and vegetables are imported into Germany from countries such as Spain, Italy, the Netherlands, Turkey, and Ecuador. Organic grains and cereals, including wheat, rice, and oats are imported from countries such as Ukraine, Italy, Austria, and Hungary to supplement its own production. Organic dairy products, including cheese and yogurt, are also imported into Germany. These items originate from countries such as France, Austria, the Netherlands, and Denmark. Organic meat and poultry products, including beef, chicken, and pork, come from countries such as Denmark, the Netherlands, Austria, and France. Organic wine is imported into Germany from various countries, including France, Italy, Spain, and Austria.

Organic Products imported from India in Germany

India exports a variety of organic products to Germany, meeting the demand for organic goods in the German market. India is known for its diverse range of organic spices such as organic turmeric, organic cardamom, organic black pepper, organic cinnamon, and organic ginger. These spices are widely used in German cuisine and are imported in significant quantities. In addition, India produces a large quantity of organic tea, including black tea, green tea, and herbal teas. German consumers have a growing interest in organic tea, and India supplies a portion of this demand. Organic rice, particularly varieties like basmati rice and jasmine rice, is imported from India into Germany. Organic rice from India is appreciated for its quality and flavour. Organic lentils, chickpeas, and beans are among the products exported from India to Germany. With the increasing population of vegetarian and vegan individuals, legumes are highly valued for their nutritional richness as a protein source.



India exports also a range of organic Ayurvedic products to Germany, including organic herbal supplements, organic oils, and organic skincare products. These products cater to the growing demand for natural and holistic wellness products in Germany.

Regarding the non-food products, Germany imports organic cotton fibres and textiles for use in the textile and fashion industries.

Organic Plant Production in EU and Germany



Figure 1 Typical Landscape in Germany including forage, cereal production and forest

Europe: Organic retail sales by country 2022

Source: FiBL survey 2024

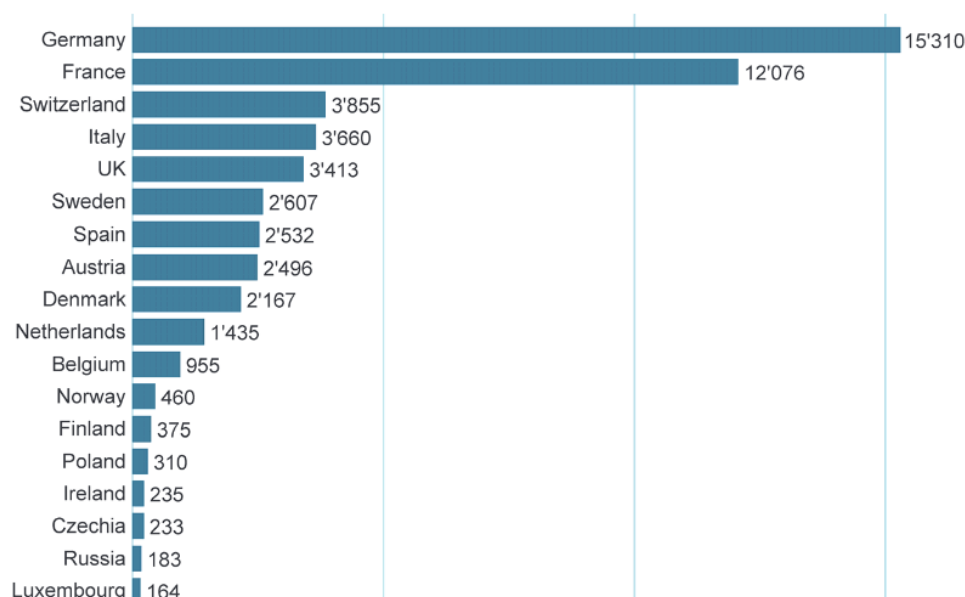


Figure 2 Europe: Organic Retail Sales by Country 2022

The current objective of the German Government is to achieve a 30% share of organic farming in the total agricultural area by the year 2030.

In 2023, the agricultural area dedicated to organic production saw a notable increase from 1,859,842 hectares to 1,940,301 hectares, marking a growth of 4.3%. The majority of this organic agricultural area, totaling 1,234,022 hectares, is managed within organic associations, thereby adhering to both the association's requirements and the EU legislation governing organic production and labelling. Additionally, there are 706,279 hectares of organic agricultural land managed outside of organic associations. As a result, organic land accounted for 11.8% of the overall agricultural area.

The number of farms engaged in organic production stood at 36,535, representing 14.3% of all farms in Germany (5). While there is also growth in the turnover of organic products among farmers – with an 11% increase observed in 2022 (6) – reaching the Government's target of 30% organic farming by 2030 poses a significant challenge.



Figure 3 Hay harvest (7)

In 2022, more than half of the organic agricultural area consisted of pasture, primarily utilized as meadows and pastures for livestock production. In terms of arable land, cereals emerged as the dominant crop, closely followed by forage production, legume crops, and oilseeds. Specifically, the arable land dedicated to oilseeds in 2022 encompassed 43,000 hectares, marking a second consecutive increase of 10,000 hectares compared to the previous year (6). This signifies a growth rate of 40% in 2021 and 30% in 2022.

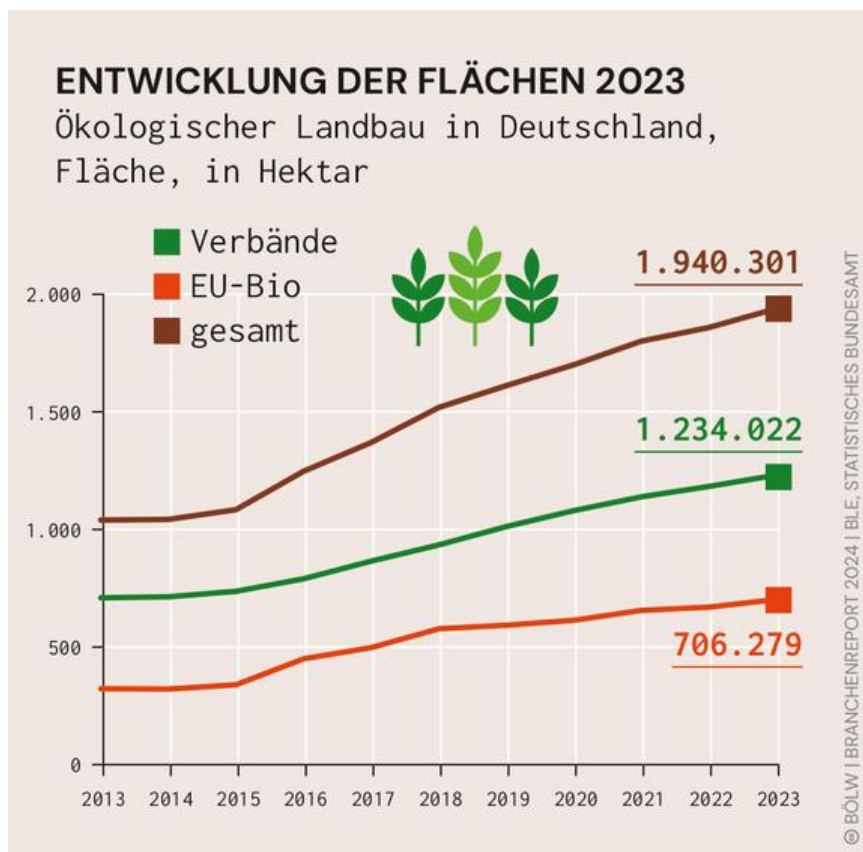


Figure 4 Organic Farming in Germany, area in hectare (overall, organic (EU), plus private organic standard) (6)

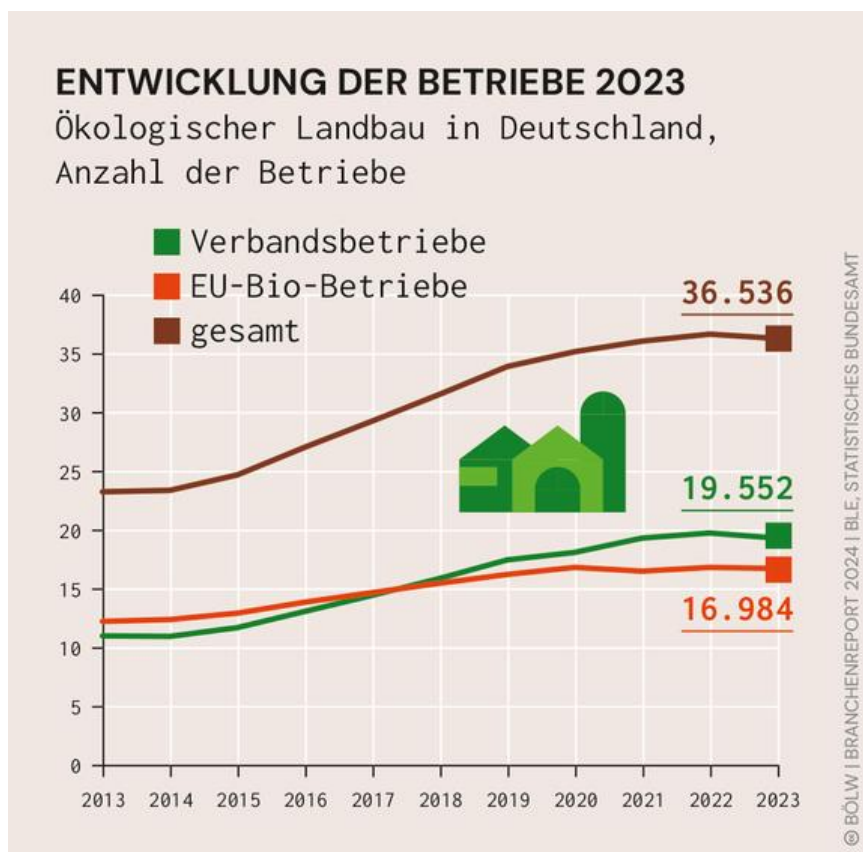


Figure 5 Number of Operators with Organic Production (overall, organic (EU), plus private organic standard) (6)

Organic Agriculture in India

Organic farming in India has a long history dating back to ancient times. However, the country witnessed a notable transition towards chemical-based farming during the Green Revolution of the 1960s. While initially boosting productivity and addressing food scarcity, this method brought forth adverse effects like soil degradation, emergence of new pests and diseases, and contamination of the food chain with harmful chemicals. Acknowledging the necessity to sustain agricultural productivity while preserving the environment, organic farming has emerged as a viable solution. It emphasizes optimal, balanced, and scientifically managed land, water, biodiversity, and natural resources, while minimizing external inputs.

According to the IFOAM Organics International definition, recognised internationally, Organic Agriculture is a production system that sustains the health of soils, ecosystems, and people. It relies on ecological processes, biodiversity and cycles adapted to local conditions, rather than the use of inputs with adverse effects. Organic Agriculture combines tradition, innovation, and science to benefit the shared environment and promote fair relationships and good quality of life for all involved.

As per the available statistics, India with its organic certification area of 4.7 million ha, ranks 2nd in terms of World's Organic Agricultural land and with its 2.48 million number of farmers, ranks 1st in terms of total number of producers (8).

Farmers and enterprises in India embrace organic agriculture for various reasons. In regions with low rainfall, often characterized as no- or low-input zones, organic farming has been a traditional practice, possibly due to limited resources for conventional agriculture. Many of these farmers operate without any certification, despite adhering to organic methods. They are also referred to as 'default organic'. In other instances, farmers transition to organic farming after recognizing the adverse effects of conventional agriculture, such as diminished soil fertility, food contamination, and rising input costs. This group encompasses both certified and uncertified farmers. A third category consists of farmers and enterprises that strategically adopt commercial organic agriculture to capitalize on the premium prices offered for certified organic produce (9).

Comparative Analyse of the German and Indian Organic Farming Certification System

The Certification System in Germany

Organic Production Logo of EU, National Logos, Private Logos

The organic production logo of the European Union may be used in the labelling, presentation and advertising of products which comply with the requirements for organic production and labelling of the EU¹. Terms like "organic", "bio", "eco" and other similar terms shall not be used for the labelling, advertising material or commercial documents of a product which does not comply with this Regulation².

As a result, the notification of an operator, who wants to place organic products on the market is mandatory and this operator has to meet the requirements of EU legislation for organic production and labelling.

¹ Regulation (EU) 2018/848 art. 33 par. 1




² Regulation (EU) 2018/848 art. 30 par 2

In addition to utilizing the EU organic logo, operators may also opt to use national logos or private logos. The utilization of the German "Bio-Siegel," established in 2001, could be advantageous as it predates the EU logo. Consequently, certain consumers may recognize organic products through this emblem rather than the EU logo. Operators intending to employ the "Bio-Siegel" must notify this action to the central competent authority.

Furthermore, organic associations maintain their own logos, which operators may use if they are members of the association and meet all its requirements. Members of such associations anticipate that consumers will recognize products labelled with the association's logo as meeting stricter standards than those outlined in EU legislation. For instance, adherence to both EU regulations and the association's specific requirements for managing the entire holding is typically mandatory. This requirement is commonly shared among all organic associations.

Many long-time consumers of organic products are well-informed about the distinctions between the organic production logo, the "Bio-Siegel," and the logos of various organic associations, and they actively take note of these differences.

Table 1 EU Logo, National Logo, the Logos of Organic Associations

EU and National logos	Private Logos of Organic Associations
 <p>Organic production logo of EU</p>	
 <p>National Logo of Germany ("Bio-Siegel")</p>	

The organic associations (see Table 1) are all affiliated with the International Federation of Organic Agriculture Movements, IFOAM e.V. Within IFOAM, agricultural systems have been standardized and later transformed into legally enforced regulatory frameworks (10).

Certain organic associations have established market organizations to provide their members with products that comply with the association's standards, such as feed and seeds. Moreover, members benefit from selling their harvested products to these market associations, as they often secure better prices.

Furthermore, the retail trade has introduced and promoted their own organic brands for use on organic products.

For imported products from third countries, the use of the European Union's organic production logo is optional³.

EU legislation

The most recent EU legislation, Regulation (EU) 2018/848, which came into effect in 2022, is complemented by several additional regulations containing detailed rules. Compared to the previous regulation, which had only two supplementary regulations, the complexity of the legislation has significantly increased. **Error! Reference source not found.** illustrates this complexity of EU legislation concerning organic production and labeling. Notably, Table 3 does not include regulations that solely amend existing regulations. Entries highlighted in blue do not exclusively pertain to organic production; these regulations also encompass food and feed laws, regulations on animal health and welfare, as well as plant health and protection products within the EU. Regulations highlighted in green are applicable to organic production in third countries.

Table 2 EU Regulations with rules regarding Organic Production

Regulation	contains rules regarding
2017/625	Official controls
2018/848	Organic production and labelling
2019/723	Annual reports to be used by member states
2019/1715	Information Management System for Official Controls
2019/2123	Identity checks / physical checks on consignments to be imported
2019/2124	Onward transportation of consignments to be imported through the Union
2019/2130	Operations to be carried out during and after documentary checks, identity checks and physical checks on consignments to be imported
2020/464	Retroactive recognition of periods for the purpose of conversion; detailed rules regarding livestock production ...
2020/2146	Derogations in catastrophic circumstances
2021/279	Procedural steps in case of suspicion; methodology of an official investigation; group of operators: composition, dimension, documents and records; minimum percentages of controls and sampling; Measures in case of established non-compliance; exchange of information
2021/771	Traceability checks, mass balance checks, official controls of groups of operators
2021/1165	Products and substances for the use in organic production
2021/1189	Production and labelling of plant heterogeneous material
2021/1342	Supervision of Third Countries
2021/1378	Certificate for operators and groups of operators in Third Countries
2021/1698	Recognition and Supervision of Control Authorities and Control Bodies in Third Countries and other detailed rules
2021/2119	Records and declarations to be kept by operators
2021/2304	Complementary certificate certifying the non-use of antibiotics in organic production of animal products for the purpose of export
2021/2306	Import: Official controls of consignments containing organic products intended for import in to EU, certificate of inspection
2021/2307	Import: documents and notifications required for consignments intended for import into EU, extract of certificate of inspection;

³ Regulation (EU) 2018/848 art. 33 par. 3

	Notification of suspected or established non-compliance
2021/2325	List of Third Countries, Control Authorities and Control Bodies, that have been recognized under the old regulation (still valid / transitional periods)
2022/1450	non organic protein feed for the production of organic livestock
2022/2379	statistics on agricultural input and output (Member States)
2023/1195	format of the information to be made available by Member States on the results of official investigations concerning cases of contamination with products or substances not authorised for use in organic production
2023/2419	labelling of organic pet food

Regulation (EU) 2017/625, concerning official controls, extends beyond the control system for organic production to encompass nine other areas. This legislation was adopted by the European Parliament to enhance efficiency and foster improved cooperation among institutions responsible for official controls. Its objectives include promoting transparency and delineating the elements of a risk-based approach to these controls (11).

With the implementation of Regulation (EU) 2018/848 at the beginning of 2022, certain derogations were phased out, and the scope of products covered by the new rules expanded. Additionally, new regulations were introduced concerning groups of operators, along with more detailed requirements aimed at reducing the risk of accidental pesticide contamination. Specifically, operators are now required to implement and thoroughly describe precautionary measures, which have been meticulously defined.

EU auditors have noted that, despite recent improvements, many products still cannot be traced back to their agricultural producers. Furthermore, in some cases, it has taken more than three months to establish such traceability (12). As a consequence, the aim was also to enhance the traceability of organic production through the implementation of the new EU regulation.

Furthermore, the goal of this regulation is to establish a long-term compliance system for organic production in third countries, thereby aligning the relevant rules of EU member states with those of third countries.

National legislation

The EU regulations are binding in their entirety and directly applicable in all Member States. Where necessary, these EU regulations are supplemented by national law. One example is the catalogue of measures for cases of suspected non-compliance and established non-compliance, as the EU legislation requires the provision of such a common catalogue on the national level⁴⁵. Another law in Germany establishes regulations for the recognition and suspension of control bodies, as well as the penalties and prison sentences applicable in instances of non-compliance concerning organic production, labelling, and the certification system.⁶. Detailed regulations based on national laws in member states also permit mass caterers to label the organic ingredients utilized in their production⁷.

⁴ Reg. (EU) 2018/848 art. 41 par. 4

⁵ In Germany implemented by Verordnung zur Durchführung des Öko-Landbaugesetzes (Öko-Landbaugesetz-Durchführungsverordnung - ÖLG-DV) §14 / appendix 3

⁶ Gesetz zur Durchführung der Rechtsakte der Europäischen Union auf dem Gebiet des ökologischen Landbaus (Öko-Landbaugesetz - ÖLG)

⁷ Verordnung zur Regelung der Produktion, der Kontrolle und der Kennzeichnung von Bio-Zutaten und Bio-Erzeugnissen sowie zur Auszeichnung des Gesamtanteils an Bio-Lebensmitteln in gemeinschaftlichen Verpflegungseinrichtungen (Bio-Außer-Haus-Verpflegung-Verordnung - Bio-AHVV)

The Certification System in India

In the past, India has had a strong foundation in traditional organic practices, drawing from a wealth of traditional knowledge. However, the shift towards modern standards-based organic agriculture only began recently, with the increasing awareness fostered by local and national civil society organizations, as well as the rising demand for organic food in the Western world.

With the rising demand for organic food in both domestic and global markets, ensuring that agricultural products adhere to essential standards of organic production and undergo verification by independent certification agencies has become imperative. The inception of the National Programme for Organic Production (NPOP) in 2001 by the Government of India, under the Ministry of Commerce and Industry, marked the country's initial efforts towards quality assurance. The NPOP not only laid down the institutional framework for accrediting certification agencies and implementing certification programs through accredited bodies but also ensures continuous monitoring to uphold the efficiency of the system.

In 2004, the National Programme for Organic Production (NPOP) was placed under the jurisdiction of the Foreign Trade Development and Regulation (FTDR) Act, which mandated that organic products could not be exported unless they were certified under NPOP. The NPOP provided for standards (NSOP - National Standards of Organic Production), systems, criteria and procedure for accreditation of Certification Bodies, the National (India Organic) Logo and the regulations governing its use. The standards and procedures have been formulated in harmony with other International Standards regulating import and export of organic products.

In 2005, the Food and Agriculture Organization (FAO), IFOAM Organics International, and the Ministry of Agriculture in India embarked on consultations with various stakeholders to explore alternative certification systems that would be inclusive of the numerous small-scale farmers and peasants across the country. Subsequently, in 2006, the PGS Organic Council was established as a consortium of voluntary organizations advocating for organic farming. This initiative arose from the necessity for a credible verification mechanism for consumers to trace the sources of their food, at least up to the farmer group level engaged in organic crop production, distribution systems, and consumer markets.

A national consultation workshop involving the FAO, the Ministry of Agriculture in India, farmers, NGOs, and state government officials took place in 2007 to pilot the Participatory Guarantee System (PGS) in India. By 2011, the National Council of Organic Farming (NCOF) conducted a consultation workshop with PGSOC to facilitate the implementation of PGS India, officially launching it within the country.

In approximately May 2019, PGSOC submitted an application to the Food Safety and Standards Authority of India (FSSAI) for the notification of the Participatory Guarantee System Organic Council (PGSOC) as a community-managed alternative system, alongside PGS India. However, FSSAI advised PGSOC to make certain modifications and digitize their systems before granting recognition. As of now, PGSOC has faced challenges in completing the design and implementation of their technological tools due to financial constraints. Nevertheless, there remains optimism within the civil society group, as evidenced by the formation of an advisory committee last year to conduct physical verification and assess the operational structures within PGSOC.

For those seeking a comprehensive understanding of the design and implementation systems of PGS India, a detailed review report is available (attached as Annexure 1), prepared by the PGS Organic Council in 2019.

Thus, to ensure affordability and accessibility of the certification system without the reliance on only third-party certification agencies, the Ministry of Agriculture and Farmers Welfare introduced a

farmer group-centric certification system under the PGS-India program for the local and domestic market. PGS-India is a quality assurance initiative that is locally relevant, emphasizing the participation of stakeholders, including producers and consumers and operates outside the frame of third-party certification. As per IFOAM Organics International (2008) definition "Participatory Guarantee Systems are locally focused quality assurance systems. They certify producers based on active participation of stakeholders and are built on a foundation of trust, social networks and knowledge exchange". In the case of organic agriculture, PGS is a process in which people in similar situations (in this case producers) assess, inspect and verify the production practices of each other and collectively declare the entire holding of the group as organic.

The regulation - Food Safety and Standards (Organic Foods) Regulations, 2017 (13), formulated under the Food Safety and Standards Act, 2006 (34 of 2006) recognises that the organic food offered or promoted for sale shall comply with all the applicable provisions of one of the following systems, namely:

1. National Programme for Organic Production (NPOP) also known as Third Party Certification (TPC)
2. Participatory Guarantee System for India (PGS-India)
3. Any other system or standards as may be notified by the Food Authority from time to time

Both the programmes (NPOP and PGS-India) are thus officially recognised and operationally independent of each other such that the products certified under one system cannot be processed or labeled under another system. PGS-India standards have been defined in tune with National Standards for Organic Production (NSOP) prescribed under National Programme for Organic Production (NPOP) to maintain uniformity in organic production process and quality of organic products in the country. While NPOP certified products can be traded in export and in domestic market including imports, PGS-India certified products can be traded only in domestic market within India. And PGS Organic Council (Current status of PGSOC with 12 FC, 4000+ farmers and 300 groups), following NSOP plus few additional elements, is on hold for its recognition.

Started with just 42,000 ha during 2003-04, it has grown to a 4.7 million ha of cultivable land and 4.4 million ha for wild harvest collection area, during 2022-23 (8). Almost all types of agricultural, horticultural and non-food crops are being grown under organic certification process. Livestock, aquaculture, animal feed processing and handling, mushroom production, sea weeds, aquatic plants and green house crop production have also been brought under the ambit of organic certification.

Organic farming is practiced across almost all states in India, with Sikkim formally declared as a 100 percent organic state in 2016. Among all the states, Madhya Pradesh has covered largest area under organic certification followed by, Maharashtra, Gujarat, Rajasthan, Odisha, Karnataka, Uttarakhand, Sikkim, Chhattisgarh, Uttar Pradesh and Jharkhand.

Realizing the benefits of organic food, consumers are also demanding organically grown food and are willing to pay premium prices in cities. But to tap the market, to win the trust of consumers and to prevent consumers from fraud and cheating there is an inevitable need for effective regulatory systems backed by credible certification system, ensuring that the entire production and processing process has been done in compliance of the National Standards for Organic Production (NSOP) in alignment with the international standards.

Use of Logos

Jaivik Bharat



Jaivik Bharat

In 2021, FSSAI launched the “Jaivik Bharat” logo to let the end users identify the legitimate organic foods from the rest. Jaivik Bharat logo for Organic Food is an identity mark to distinguish organic products from non-organic ones. The logo is supported with the tagline "Jaivik Bharat", at the bottom, which signifies Organic Food from India. The logo showcases that the product bearing it has been authenticated as organic for the choice for consumption. Effectively intertwining all the elements of environment, the logo communicates adherence to the National Standards of Organic Farming (NSOP). Every certified organic food container shall have 'Jaivik Bharat' Logo (14).

India Organic



A trademark – “India Organic” will be granted on the basis of compliance with the National Standards for Organic Production (NSOP). Communicating the genuineness as well as the origin of the product, this trademark will be owned by the Government of India. Only such exporters, manufacturers and processors whose products are duly certified by the accredited Certification Bodies, will be granted the licence to use of the logo which would be governed by a set of regulations (15).

Government Program Supporting Organic Farming in Germany

Subsidies Being Paid to Operators with Organic Production in Bavaria

In Germany, subsidies provided to operators engaged in organic production are determined based on the size of the agricultural area dedicated to organic farming and vary depending on the specific crops cultivated. According to EU regulations governing organic operations, operators may partition their holdings into distinct production units for organic, in-conversion, and non-organic production under certain conditions. However, operators seeking subsidies for organic production must adhere to organic production requirements across their entire holdings for a minimum period of five years.

The subsidies allocated per hectare for initiating and/or maintaining organic production differ across the various federal states of Germany. In Bavaria, the current subsidy amounts are as follows:

Table 3 Subsidies for Organic Production in Bavaria (16)

INR per Hectare	1st – 2nd Year	3rd – 5th Year	After 5th Year
------------------------	---	---	-----------------------

Arable land	38,231	28,379	28,379
Pasture	38,231	25,668	25,668
Horticultural Crops	56,939	43,834	43,834
Perennial Crops	117,494	90,380	90,380



The subsidy rate is staggered, depending on the size of the holding:

- below 100 ha: 100 %
- below 200 ha: 90 %
- below 300 ha: 80 %
- more than 300 ha: 60 %

In Germany, in the event of non-compliance that compromises the integrity of organic products or fields, subsidies must be refunded. The repayment amount is contingent upon the severity of the non-compliance, ranging between 10% and 100% of the annual subsidy amount allocated for organic production.

Should an operator opt to discontinue managing their entire holding according to organic production requirements before the conclusion of the committed five-year period, they are obligated to reimburse the full amount of subsidies received for managing the holding in accordance with organic production standards.

Funding guidelines - the Federal Organic Farming Programme

The aim of the Federal Ministry of Agriculture is to improve the framework conditions for organic farming and to lay the foundations for further expansion.

However, the expansion of organic farming should be sustainable with the aim of balancing the growth of supply and demand. At present, there are signs of a continuous increase in demand for organically produced products. In contrast, supply in the area of agricultural production in Germany has expanded less strongly.

- Subsidy for conversion counselling; farmers can apply for funding for individualised conversion advice. Within the conversion period farmers can also apply for funding for advice on production technology and/or business management, but also new farmers who take over a farm, that has already been operating organically for some time can also apply for funding.
- Information and sales promotion measures; all measures that specifically inform consumers about organic farming and support the sale of organic products are eligible for funding;
- Trade fair and exhibition promotion; funding is available for appearances at national or international trade fairs and exhibitions.
- Promotion of information on organic value chains; The objective is to inform consumers about organic farming from agricultural production through processing and distribution to consumption.
- The "Guidelines for the Promotion of Organic Value Chains" support the establishment and further development of value chain partnerships for organically produced products, particularly in and for the region. The aim is to increase cooperation skills through further education, training and counselling as well as personnel cooperation capacities by creating a coordination office.
- The guideline for the promotion of advice to companies in the mass catering sector on the increased use of organic farming products offers funding to all interested companies in the mass catering sector. Above all, the demand for organic products in mass catering operations must be significantly increased in order to achieve the goal of expanding organic farming to 30 per cent of agricultural land by 2030 (17).

Supporting investments

Investments in the agriculture and food sector with its "Focus on Future Fields" programme are supported by the "Rentenbank" since 2022. In particular, small and medium-sized enterprises that want to invest in regional food production, agrivoltaic systems, environmentally friendly land management and organic farming as well as the establishment of agroforestry and paludiculture are supported. Regarding organic production the aim is to support the German government's goal of increasing the share of organic farming to 30 per cent until 2030 (18).

Demonstration Farms and Model Regions

The Federal Ministry of Food and Agriculture offers farmers a network of farms that can be visited by farmers interested in organic production and conversion to clarify open questions about organic farming. There are around 50 such demonstration farms in Bavaria. The discussions on the farms are free of charge.

There are also state-recognised eco-model regions, 27 of which are in Bavaria. These are associations of municipalities of various sizes spread throughout Bavaria. With sustainable ideas and measures, committed people - from producers to food craftsmen and marketers to consumers - are developing organic farming in their local communities. The organic model regions focus on the combination of

regional value creation, organic production and positive synergy effects from both for the development of rural areas (19).

Government program supporting organic farming in India

Government Schemes Propel Sustainable Farming Growth in India

The Government of India has been promoting organic farming in the country through two dedicated national schemes: Paramparagat Krishi Vikas Yojana (PKVY) and Mission Organic Value Chain Development for North East Regions (MOVCD-NER) since 2015 through state governments. Farmers are provided financial assistance of INR 31,000/ ha / 3 years under PKVY and INR 32,500/ ha/ 3years under MOVCDNER for organic inputs such as seeds, bio-fertilisers, bio-pesticides, organic manure, compost/ vermi-compost, botanical extracts etc (20). Under these schemes, the support provided includes forming farmers' clusters or farmer producer organizations; input procurement; value addition, including post-harvest infrastructure creation; packaging; branding and publicity; transportation; and organizing organic fairs.

Parampragat Krishi Vikas Yojana (PKVY)

The Parampragat Krishi Vikas Yojana (PKVY), launched in 2015, is the first comprehensive scheme launched by the Central Government as a centrally sponsored programme (CSP) to promote organic farming, where the Central and State Governments share the funding in varying ratio. It is 100 per cent in the Union Territories, 90:10 in the North-Eastern and Hilly States and 60:40 in the case of the other States. The scheme is implemented by the State Governments. It is implemented on a cluster basis of 20 hectare each. The farmer within the cluster is given financial assistance upto a maximum of 1 ha and the limit of assistance is Rs. 50,000 per ha during the conversion period of 3 years (21). PKVY aims at supporting and promoting organic farming through PGS India certification that is built on mutual trust, locally relevant and mandates the involvement of producers and consumers in the process of certification.

Bhartiya Prakritik Krishi Padhati (BPKP), a sub scheme of Paramparagat Krishi Vikas Yojana (PKVY) since 2020-21 is promoted for traditional indigenous practices (Natural Farming). The scheme mainly emphasises on exclusion of all synthetic chemical inputs and promotes on-farm biomass recycling with major stress on biomass mulching, use of cow dung-urine formulations and plant based preparations. Under BPKP, financial assistance of Rs 12200/ha for 3 years is provided for cluster formation, capacity building and continuous handholding by trained personnel, certification and residue analysis.

Organic cultivation on either side of River Ganga under National Mission of Clean Ganga (NMCG), natural farming, large area certification and support for individual farmers have also been introduced under PKVY to increase area under organic farming (20).

Mission Organic Value Chain Development for North East Regions (MOVCD-NER)

Mission Organic Value Chain Development for North East Regions (MOVCD-NER) is another centrally sponsored scheme launched in 2015. It is a sub-mission under the National Mission of Sustainable Agriculture (NMSA) for implementation in Arunachal Pradesh, Meghalaya, Mizoram, Nagaland, Sikkim, Tripura, and Meghalaya. The scheme aims at developing certified organic production through a value chain approach to link producers with consumers and support the entire value chain development.

Organic Farming has also been supported under other schemes viz. Rashtriya Krishi Vikas Yojana (RKVY) and Mission for Integrated Development of Horticulture (MIDH), Network Project on Organic Farming under Indian Council of Agricultural Research (ICAR).

Individual and small organic farmers groups (5-50 farmers) may also get registered with State Agriculture Department and nearby Regional Council (RC) of Participatory Guarantee System- India (PGS-India) to certify their farm as organic under PGS. Assistance of Rs. 2700/ha for 3 years is provided for PGS Certification (Cost of Certification is directly reimbursed to Regional Council of PGS-India) (20).

According to 2021 data, following acreage of land was under organic farming through various schemes Total 3.80 million hectares in the country. Approximately there is 0.62 million hectares under Paramparagat Krishi Vikas Yojana (PKVY), 0.12 million hectare under Namami Gange Programme, 0.40 million hectare under BPKP (Natural Farming), and 2.65 million hectares under National Program for Organic Production (NPOP) (22).

The Financial Assistance Scheme (FAS)

The Financial Assistance Scheme (FAS) is an export promotion scheme run by APEDA. The scheme aims to facilitate the export of agri-products by providing assistance to exporters in three broad areas, namely: Development of Export Infrastructure, Quality Development and Market Development.

Development of Export Infrastructure: APEDA recognizes the importance of infrastructure for growth of agro-industries and export of agricultural products in the value chain. The scheme component covers both fresh produce and processed food products.

The scope of this scheme helps to improve compliance of Phyto-Sanitary requirements. The assistance will be upto 40% subject to a ceiling of INR 20 million.

Quality Development: To participate/engage in international trade, it is necessary to comply with Food Safety requirements of different countries. Several importing countries demand adherence to stringent Maximum Residue Levels (MRLs). Some of the developed importing countries have set up MRLs at very low level. For this, high precision equipments are required to be installed by the food testing labs. Under this component, assistance is provided to comply with the prescribed standards of importing countries.

The different sub-components under this scheme on Quality Development falls under following 5 categories:

I. Certification of Quality and Food Safety Management Systems: Scope of this scheme is to adherence to Food safety compliance. The assistance will be upto 50% of the total cost subject to a ceiling of INR 0.5 million per certification. Scope of another sub-component in this scheme is to ensure traceability of produce at farm level and to comply with the requirements of importing countries. The assistance will be up to 50% of the cost of equipment subject to a ceiling of INR 2 millions per beneficiary.

II. Training in India and abroad to be implemented by APEDA: Training and Study Tours in India and abroad. Scope of this scheme is for the capacity building, development of stakeholder awareness. The assistance will be up to 50% of the travel cost and training fee subject to maximum of INR 0.3 million per adoption of best practices participant per year. The amount will be restricted to one participant per organization. Stakeholder's awareness - The assistance will be up to INR 0.5 million.

III. Testing of water, soil, residues of agrochemicals/pesticide, veterinary drugs, hormones, toxins, heavy metals, microbial count etc. in APEDA scheduled products: The scope of this component is for

ensuring quality and food safety compliance. The assistance will be upto 50% of the total cost subject to a ceiling of INR 5000/- per sample. The upper ceiling per beneficiary: INR 2 millions during 5 years (2021-22 to 2025-26)

IV. Laboratory for export testing and in-house lab equipments: The scope of this component is for the compliance of MRL etc as per the global standards by assisting National Referral Laboratories / govt. / public sector / institutions for concerned produce. The component would be 100% implemented by APEDA. Another scope is for strengthening laboratory infrastructure for export certification. The assistance will be up to 50% of the cost subject to maximum of INR 10 million.

V. Introduction of new plant / seed / germplasm varieties for export oriented / varieties suitable for processing potential produce: The scope of this component is for introduction of planting material of new varieties, which is mandate of Ministry of Agriculture and their research institutions like ICAR. However, in order to maintain competitive edge in the international market and to meet the requirements / tastes of international consumers, preferences of such markets need to be kept in mind. Therefore, APEDA proposes to provide assistance for such initiatives to institutions of Govt. of India/ exporters. The assistance will be up to 90% of the cost of the imported plant material to relevant research institutions and up to 60% to exporters subject to a ceiling of INR 5 million.

Market Development: This component helps exporters to achieve market access in new markets and help sustain their presence in the existing markets. It covers structured marketing strategies for export of food products, market intelligence for taking informed decisions, international exposure, skill development, capacity building and high-quality packaging.

In case of non- implementation or deviation of the project as per the IPA/MoU, APEDA may cancel the approval granted for the project and the beneficiary shall be liable to refund the entire amount (including processing fee) with interest @ 10% per annum to APEDA from the date of release of assistance (23).

Gaining Access to the Organic Market in Germany

The Domestic Market for Organic Products

Prior to placing any products on the market as 'organic' or as 'in- conversion' or prior to the conversion period, operators, which produce, prepare, distribute or store organic or in-conversion products, which import such products from a third country or export such products to a third country, or which place such products on the market, shall notify their activity to the competent authorities of the Member State in which it is carried out and in which their undertaking is subject to the control system⁸. Moreover, such operators must be in possession of a certificate to place their products on the organic market.

As a result, an operator, planning to start with organic production have to request from control bodies offers for certification regarding their holding. The costs may vary depending on the control body. As soon as the operator has decided in favour of a control body and the control body has received the certification contract submitted from the operator, the certification process begins.

The operators have to draft a description of their holding including all relevant measures to meet the requirements of organic production and the precautionary measures to prevent contamination of organic products not authorized in organic production and have to send these documents to the control body as well. As soon as possible after conclusion of the inspection contract, usually within 6 weeks, the first on-site-inspection shall be carried out by the control body.

⁸ Regulation (EU) 2018/848 art. 34 par 1



The main focus of this first on-site-inspection is to verify, whether the description of the holding is comprehensible and the measures described are adequate. Farms must also undergo a conversion period during which they cannot place their products on the market as organic. However, they must meet already all requirements from the beginning of the conversion period:

In the case of plants and plant products the production rules shall have been applied during a conversion period of at least two years before sowing, or, in the case of grassland or perennial forage, during a period of at least two years before its use as organic feed, or, in the case of perennial crops other than forage, during a period of at least three years before the first harvest of organic products⁹.

After this inspection, the report of the auditor is reviewed by a second person qualified and responsible for certification of operators within the control body, to confirm or reject the findings and suggested measures taken by the auditor and the beginning and ending of the conversion period verified within the inspection.

After completion of the conversion period, operators receive their first certificate, confirming the categories of products, which can be placed as organic on the market by the operator.

Additionally, products harvested after the first year of the conversion period can be placed on the market as “in-conversion products”¹⁰ and after they have received their certificate confirming their plant products as “in conversion”.

Certification of Group of Operators

The requirements of EU legislation are regarded as too complicated. The bureaucratic burdens are regarded by the farmers as too high, as they have to set up a legal entity.

There are structures, similar to those of a group of operators.

⁹ Regulation (EU) 2018/848 annex II part I, number 1.7.1

¹⁰ Regulation (EU) 2018/848 art. 10 par. 4 subpar. 2 lit. b)

Such structures have been implemented for example in cases of small-scale farmers managing old fruit orchards.



In these structures, the farmer acts like a subcontractor of the wholesaler. He is the owner of the parcels. However, from a legal point of view, on a basis of a contract, the wholesaler is the owner of the yield of these fruit orchards and is responsible for ensuring, that all requirements are met by the farmers under his contract.

These structures also aim to the conservation of the traditional landscape, that is characterised by these orchards and which is mainly located in South Germany.

Exporting Products from Germany in Third Countries

The export of organic products from Germany to third countries only plays a subordinate role, as described in chapter Organic Market and Organic Production in Germany. Only few operators need access to the market of organic products in Third Countries. As a result, for the operators, who need additional certification due to a lack of trade agreements between the EU and those countries, it could be difficult to find a control body which is able to conduct the controls of the different standards in one single on-site inspection and to certify as EU-organic as well as the scope of that Third Country.

The Institutions Involved in the Control and Certification System in EU and Germany

Under EU legislation, competent authorities in member states of the European Union are tasked with organizing official controls and other related activities¹¹. These authorities have the discretion to

¹¹ Reg. (EU) 2018/848 art. 3 no. 54 in conjunction with Reg. (EU) 2017/625 art. 3 par. 3

delegate some or all of their responsibilities to control authorities¹². In contrast, control bodies are legal entities to which competent authorities have delegated specific control tasks or other official duties¹³.

EU member states organize their Control and Certification Systems in various ways. For instance, Belgium, Spain, Germany, and Austria each have multiple competent authorities operating within their regions or federal states. Many member states have delegated control tasks and associated activities to control bodies, while some have granted their authority to control authorities. A few member states have both control authorities and control bodies operating within their jurisdictions: Control authorities and control bodies (see Figure 6).

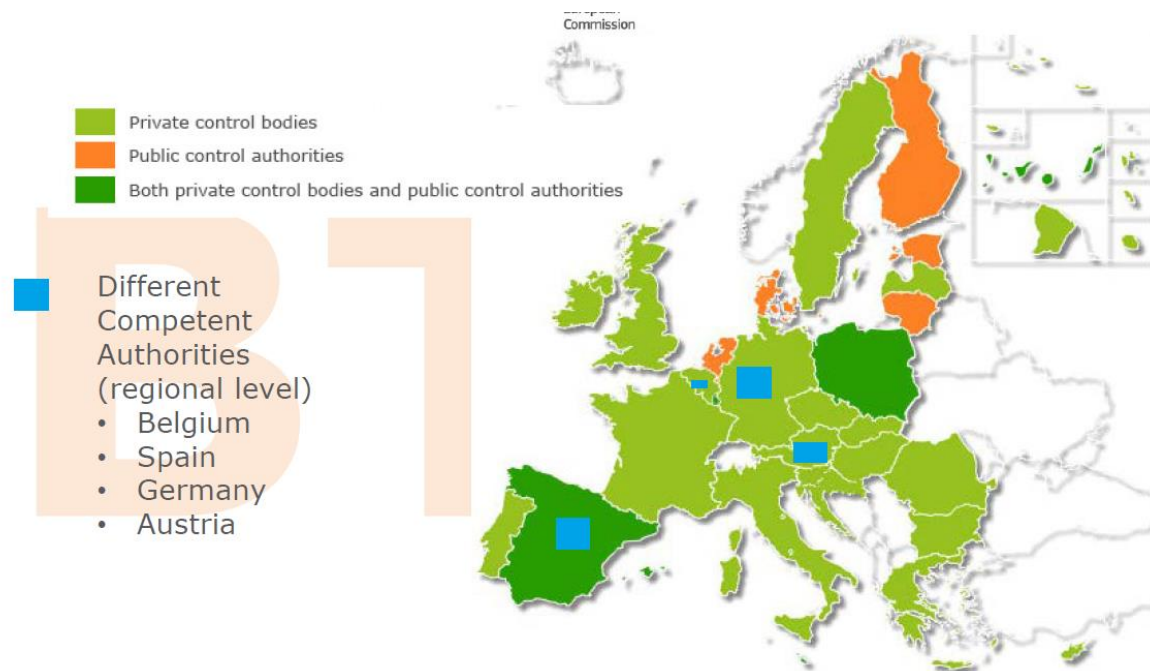


Figure 6 Different ways to organize the certification system within member states of EU (24)

The Control and Certification System in Germany

Germany operates under a federal system where responsibilities are divided between the national level and the federal states based on the subject area. Private control bodies carry out the official controls and the certification on operators.

The Functions of the Competent Authority at the National Level in Germany

Bundesanstalt für Landwirtschaft und Ernährung (BLE / Federal Institute for Agriculture and Food):

The Federal Ministry of Food and Agriculture conferred the tasks to be carried out by the central competent authority of the Member states of the EU to the BLE.

The central competent authority is responsible for both recognizing control bodies and, if necessary, withdrawing such recognition. Additionally, the personnel of the control bodies conducting inspections or certifications must be also recognised by the central competent authority. The control bodies are required to demonstrate that their staff undergoes annual training and conducts a minimum number of inspections.

Additionally, annual audits are carried out by this authority in the offices of the control bodies to verify, if procedures described in the quality management system are followed and meet all the

¹² Reg. (EU) 2018/848 art. 3 no. 55 in conjunction with Reg. (EU) 2017/625 art. 3 par. 4

¹³ Reg. (EU) 2018/848 art. 3 no. 56 in conjunction with Reg. (EU) 2017/625 art. 3 par. 5

requirements of EU legislation regarding organic production and labelling. If required, the central competent authority is supported by the competent authorities of the federal states within these audits.

Moreover, this authority grants temporary authorizations regarding the utilization of non-organic ingredients in food in cases such products are not listed in the annex containing those authorized non-organic agricultural ingredients to be used for the production of processed organic food, in case they are not available on the organic market.

The Functions of the Competent Authorities at the Federal States' Level in Germany

In 15 of the 16 federal states of Germany, regional competent authorities oversee the organic market.

In case of unauthorized usage of terms referring to the organic products by operators those authorities shall ensure, that no reference is made to organic production in the labelling and advertising of the entire lot or production run concerned¹⁴. In the event of serious, or repetitive or continued non-compliance, these authorities, shall ensure that the operators concerned are prohibited from marketing products which refer to organic production for a given period, and that their certificate be suspended or withdrawn, as appropriate¹⁵.

Also, in case of suspicion of non-compliances it shall decide, whether it is adequate and proportionate to provisionally prohibit both the placing on the market of the products concerned as organic and their use in organic production and on the basis of an official investigation¹⁶.

The competent authorities also carry out witness audits and review audits on the control of the control bodies to verify whether those controls are adequate and effective.

Moreover, the competent authorities of the federal states have to designate those laboratories, which may conduct the analysis of the samples taken in the frame of the certification system.

Ständiger Ausschuss (Standing Committee): Representatives of the relevant authorities meet two or three times a year in order to exchange their views on current specific issues and to find common decisions regarding these issues.

Länderarbeitsgemeinschaft Ökologischer Landbau (LÖK / States Working Group on Organic Farming): Representatives of the Federal States, usually of the Ministries meet two or three times a year in order to approve or reject the decisions of the standing committee.

Control Bodies and Auditors in Germany

Control bodies carry out the controls at the operators' level, including sampling and are also responsible for the certification of the operators.

Control bodies have to submit every inspection report and other relevant documents in cases of non-compliances detected, which have the potential to affect the integrity of the organic product.

In cases of suspicion, the control body has to carry out an official investigation with a view to verifying compliance with this Regulation. Such investigation shall be completed as soon as possible, within a reasonable period, and shall take into account the durability of the product and the complexity of the case¹⁷. As it is the authorities that make the decisions regarding the products under suspicion, the control bodies have to submit the results of the official investigations carried out by them.

¹⁴ Regulation (EU) 2018/848 art. 42 par. 1

¹⁵ Regulation (EU) 2018/848 art. 42 par. 2

¹⁶ Regulation (EU) 2018/848 art. 41 par. 1 b)

¹⁷ Regulation (EU) 2018/848 art. 41 par. 1 a)

Control bodies must be accredited according to ISO/IEC 17065 standards.

As of 2022, 19 control bodies have been recognized in Germany and are actively involved in overseeing and certifying organic production (25). The list of recognized control bodies is published by the central competent authority and can be accessed online (26).

Control bodies have to proof adequate qualification for each inspector to get the authorization to carry out controls and certification of operators. In order to maintain the authorization of their auditors, the control bodies must provide evidence of at least 20 annual inspections or certification decisions carried out for each these auditors. Additionally, at least five annual inspections or certification decisions must be carried out in each authorised inspection area.

Laboratories in Germany

In Germany, private laboratories are responsible for conducting the analysis of samples taken during official controls. However, the competent authorities are required to designate official laboratories for the purpose of conducting laboratory analyses, tests, and diagnoses on samples collected during official controls and other related activities¹⁸. The competent authority has to verify, whether this laboratory is able to carry out the analysis and is accredited in accordance with EN ISO/IEC 17025 standard.

Such laboratories must have a sufficient number of suitably qualified, trained and experienced staff. They have to ensure that the tasks conferred upon it are performed impartially and which is free from any conflict of interest as regards the exercise of its tasks. At least these laboratories have to ensure, that the results of the analysis carried out on the samples taken during official controls and other official activities can be delivered in a timely manner.¹⁹

Additionally, European Union reference laboratories have been designated by the European Commission. Such reference laboratories shall contribute to the improvement and harmonisation of methods of analysis, test or diagnosis to be used by the official laboratories and of the analytical, testing and diagnostic data generated by them²⁰.

Upon request by the European Union reference laboratory or national reference laboratory, official laboratories shall take part in inter-laboratory comparative tests or proficiency tests that are organised for the analyses, tests or diagnoses they perform as official laboratories²¹.

Accreditation Body in Germany

The Deutsche Akkreditierungsstelle (DAkkS) is the national accreditation body of the Federal Republic of Germany. DAkkS assesses both, the independence of the control bodies, making the application and its technical competence, including for example the qualifications of its staff, the quality management system, the necessary equipment and facilities and the methods used. The procedure consists of a defined process in several steps, among them the application, assessment, accreditation decision and surveillance. Also the national private laboratories are accredited by DAkkS.

Accreditations in the sovereign area are generally issued for an unlimited period of time. They remain valid until they are revoked, suspended, restricted or amended by DAkkS or until the body gives up its accreditation.

¹⁸ Regulation (EU) 2017/625, art. 37 par. 1

¹⁹ Regulation (EU) 2017/625, art. 37 par. 4 lit. a - e

²⁰ Regulation (EU) 2017/625, art. 41 par. 1 lit.

²¹ Regulation (EU) 2017/625, art. 38 par. 2

The Paying Agencies in Germany

Landwirtschaftsämter / Landwirtschaftskammern (Departments of Agriculture): are situated within the framework of public regional administration. Farmers are required to submit their applications to their respective agency on an annual basis. To qualify for subsidies related to organic farming, they must provide their agency with a confirmation issued by their control body. This confirmation verifies whether the entire holding is managed under organic production and confirms whether the operator meets all requirements. It also indicates if any non-compliances have been identified that could compromise the integrity of the organic products.

In instances of non-compliance, these agencies seek guidance from the competent authority on reducing subsidies.

The Institutions Involved in the Control and Certification System in India



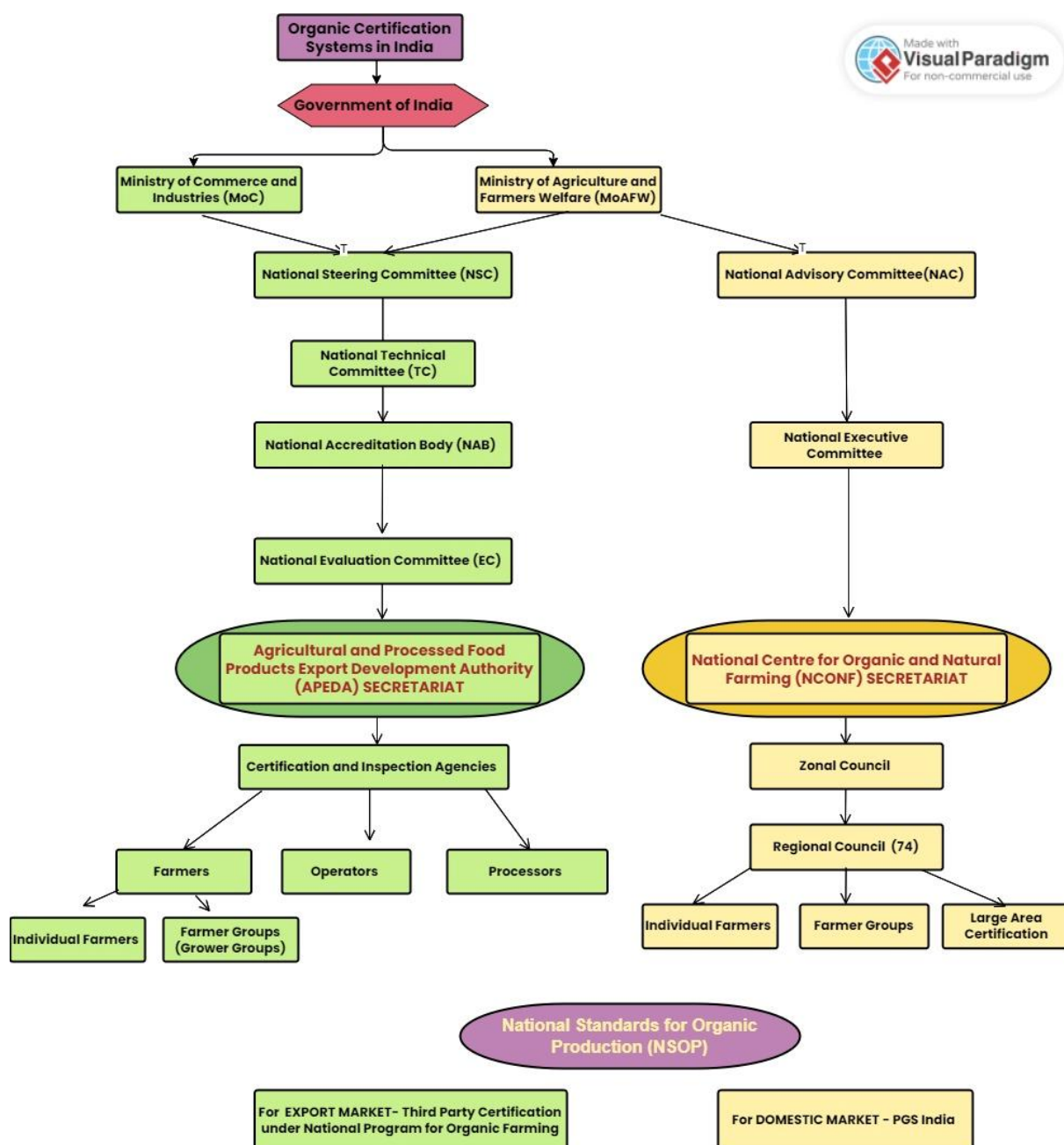


Figure 7 Institutions involved in the Control and Certification System in India

The Control and Certification System in India regarding the domestic market

Institutions at the National and Regional Level regarding PGS India

PGS India operational structure is as shown in Figure 7 with **National Centre for Organic and Natural Farming (NCONF)** as the Secretariat for PGS India certification system.

National Centre for Organic Farming is a nodal organization for promotion of organic farming under INM Division, Department of Agriculture & Farmers Welfare, Ministry of Agriculture & Farmers Welfare, Government of India under Soil Health Management component of National Mission on Sustainable Agriculture (NMSA). NMSA derives its mandate from Sustainable Agriculture Mission which is one of the eight Missions outlined under the National Action Plan on Climate Change (NAPCC). NCOF came into force in 2004, for implementing National Project on Organic Farming (NPOF) along with its Regional Centres.

National Centre of Organic Farming has been renamed as National Centre for Organic and Natural Farming (NCONF), Ghaziabad in March 2022 with **five Regional Centres for Organic and Natural Farming (RCONFs)** located at Ghaziabad (North Zone), Bengaluru (South Zone), Bhubaneswar (East Zone), Nagpur (West and Central) and Imphal (North East zone).

NCONF currently has 74 active Regional Council, with a Certified Cumulative Area of 1.06 million ha.

A comparative analysis between the PGSOC, PGS India and NPOP, the three certification systems in India - (Annexure 2) by PGS Organic Council is available if one wants to better understand the differences and functioning of these systems in depth.

Control Bodies and Auditors in India

Control Bodies are termed as Regional Council in case of domestic certification through PGS India.

The Regional Council (RC) must be an organisation that is legally registered under any legal act such as Society Act, public trust act, Cooperative act or Companies act with the Government of India. The organisation has proven record on promotion of agriculture and organic management practices along with other infrastructure and personnel requirements.

The application of a possible RC is processed and their authenticity is verified by the National Advisory Committee (NAC) and the Zonal Council (ZC). The applicant is authorised as Regional council by PGS-NAC, PGS Secretariat (currently NCONF) and ZC for a validity period of 3 years. The authorization is renewed by NAC post receipt of application by the RC based on the recommendation and surveillance report of ZC and NCONF.

Laboratories in India

Food Testing and analysis is an essential part of the food safety ecosystem to assure that the food is safe to consume. For the same, FSSAI recognizes and notifies NABL²² accredited food laboratories under Section 43 of FSS Act, 2006. FSSAI is also recognizing foreign laboratories to reduce the time in clearance of food consignments at ports. FSSAI approved notified laboratories as National Reference Laboratories (NRLs) and as ancillary facility of NRLs (ANRLs) for specific purpose. Lists of all these laboratories are given below-

1. Primary food laboratories: The Food Authority notifies food laboratories and research institutions accredited by National Accreditation Board for Testing and Calibration Laboratories or any other accreditation agency for the purposes of carrying out analysis of samples by the Food Analysts. There are currently 215 laboratories and research institutions across India as of list dated on 12.12.2023 (27).

2. Referral food laboratories: The Food Authority recognizes referral food laboratories for the purposes of carrying out analysis of appeal samples. Presently there are 20 referral food laboratories as of list dated on 01.07.2022 (28).

3. National Reference Laboratories: FSSAI has recognised National Reference laboratory (NRL) to set up a country wide standard for routine procedures, validation of such standard procedure / testing methods, development of new methods and ensuring proficiency in testing across the food laboratories with special reference to the risks or food categories. Either a primary food laboratory or a referral food laboratory can be considered for declaration as a NRL. Presently there are 11 NRLs and 2 ANRLs as of list dated on 25.08.2023 (29).

²² NABL = National Accreditation Board for Testing and Calibration Laboratories

Each NRL shall carry out the following functions, namely - a. be a resource center for provision of information for certified reference materials and reference materials; b. develop standards for routine testing procedures and reliable testing methods; c. provide technical support in the area of competence; d. evaluate the performance of other notified laboratories; e. coordinate exchange of information amongst notified food laboratories; f. collaborate for data generation among the network of notified food laboratories and referral food laboratories and collate the data related to their specific domain; and g. such other functions as may be specified by the Food Authority from time to time.

The Control and Certification System in India regarding products to be exported (NPOP)

The NPOP standards (NSOP) were last updated in 2014, and anticipation surrounds the forthcoming version expected in the near future.

The Functions of the Competent Authority at the National Level regarding NPOP

APEDA: Agricultural and Processed Food Products Export Development Authority (APEDA) functions as the Secretariat for the implementation of the NPOP. The responsibilities of APEDA, as a Secretariat, includes taking steps for the implementation of the decisions of the NSC, NAB and the Committees constituted under the NPOP, organize and convene all the meetings of various committees under NPOP, evaluation of the Certification Bodies, investigation of complaints received from the importing countries, initiate any other multilateral issues pertaining to equivalence etc. that would promote the export of organic products, receive and screen applications from the applicant bodies, coordinate and arrange their evaluations, issue necessary implementation guidelines to the accredited Certification Bodies for inspection and certification from time to time. APEDA shall meet the requirements of ISO 17011 for accreditation of Certification Bodies under the NPOP.

NSC: The Department of Commerce (DoC) constitutes an apex policy formulation committee called the National Steering Committee (NSC) to be headed by Commerce Secretary. The NSC is responsible for the implementation and administration of the NPOP. The NSC are serviced by APEDA as the Secretariat. The members of the NSC are drawn from the Department of Commerce, Ministry of Agriculture, Ministry of Textiles, Department of Animal Husbandry, Dairying & Fisheries, Ministry of Food Processing Industries, Ministry of Science & Technology, Ministry of Rural Development, Ministry of Environment & Forest, APEDA, Marine Products Export Development Authority (MPEDA), Commodity Boards (such as the Tea Board, Spices Board, Coffee Board, Food Safety and Standards Authority (FSSAI) and other government and private organizations having experience in organic farming and production.

The responsibilities of the NSC include approving procedures for implementation of the NPOP, which would include the NSOP, Accreditation policy and procedures as well as the regulations for use of the Certification Trade Mark "India Organic Logo". They are responsible for delegating the implementation of the NPOP. They constituted the National Accreditation Body (NAB), Technical Committee(s) and such other committees as deemed appropriate for the implementation of the NPOP and take decisions on the proposals placed by various committees set up by NSC. The NSC meets at least once a year to review the functioning of the NPOP and take decisions on various policy matters concerning the implementation and functioning of the NPOP.

NAB: The National Accreditation Body (NAB), is serviced by APEDA. The NAB consists of members representing Department of Commerce, Ministry of Agriculture, FSSAI, MPEDA and various Commodity Boards (such as the Tea Board, Spices Board, Coffee Board). The responsibilities of the NAB include drawing up procedures for the evaluation and accreditation of the certification

programmes of the Certification Bodies, formulating procedures for evaluation of the Certification Bodies, accreditation of the Certification Bodies, constituting an Evaluation Committee and any other responsibilities assigned by NSC from time to time.

Technical Committee (TC): The NSC constitutes various Technical Committee(s) comprising of experts drawn from relevant field/organizations to formulate various technical standards, suggests amendments/changes in the existing standards, review the standards from time to time and to advise the NSC on relevant issues pertaining to organic sector.

Evaluation Committee (EC): The NAB constitutes an Evaluation Committee to evaluate the implementation of certification programme of the Certification Bodies. The NAB draws a panel of experts qualified in the field of agricultural sciences or any related field of food industry. These experts are drawn from organizations that are not involved in the certification activities and shall sign a contract of confidentiality with APEDA. The experts have required training in audit procedures. The Certification Body shall not be evaluated by the same committee for more than two consecutive years. An Evaluation Committee is drawn from this panel of experts and comprise of minimum of three experts. Such Evaluation Committee will evaluate the Certification Body at least once in a year and submit the conformity /non-compliance report, observations, recommendations and supporting documents to APEDA after completion of the evaluation. APEDA reviews the report(s) of the Evaluation Committee and submit its assessment report and present it, along with its recommendations, to the NAB for accreditation decision. Any deviation from the report of the Evaluation Committee is recorded in writing by APEDA.

Control Bodies and Auditors within the NPOP Certification System

Control bodies are termed as Inspection and Certification bodies for NPOP certification system. The Certification and Inspection bodies (CB) must be an organisation that is legally registered under any legal act such as Society Act, public trust act, Cooperative act or Companies act with government of India. The organisation must comply with ISO Guide 65. National Accreditation Body (NAB) develops procedures for the evaluation and accreditation of the certification programmes of the Certification Bodies and also formulates procedures for evaluation and accreditation of the CBs.

Field evaluation of the applicant CBs is conducted by the Executive committee nominated by the NAB. The applicant is accredited as a certification and inspection agency by NAB for a validity period of 3 years. The accreditation is renewed by APEDA on behalf of NAB post receipt of application for renewal. The renewal shall be based on the past performance of the Inspection and Certification Agency and APEDA has the right to renew or reject such applications, at their absolute discretion.

See Figure 7 for easy understanding along with the logos.

Previously, any Certification Body from outside India could visit the country, certify farms, and depart. However, since 2005, it has become compulsory for every Certifying Service body to establish an office in India. They are required to certify farms in accordance with the National Programme for Organic Production (NPOP) standards initially and then adhere to various country-specific regulations.

International Organic Equivalency with India

Timeline on Organic Equivalency with India is given below to better understand the series of major regulatory changes with respect to Organic Certification.

Organic Equivalency with the European Union (EU):

2009 – Renewal of NPOP Equivalence with EU standards (30).

In 2021 an EU Regulation established among other lists the list of control bodies that have been recognised for the purpose of importing organic products into the Union. The following is stated in recital 9²³:

“As regards India, a large number of consignments totalling to thousands of tons of allegedly organic sesame seed contaminated with ethylene oxide (‘ETO’) have been imported from that third country, in particular from operators controlled by control bodies supervised by India, and resulting in about 90 notifications in the Organic Farming Information System (OFIS). It appears that the presence of ETO – which is carcinogenic for humans – was detected in organic products before 2020. Various reliable methods for the analysis of ETO have been developed over the last three decades and have therefore been available in order to detect such contaminations. As regards those OFIS notifications, the levels of contamination found in the consignments have usually by far exceeded the maximum residue level established for ETO, with the exact levels of contamination varying depending on the consignment. This has led both to consumers being misled and to a significant health risk. The occurrence of the ETO contamination and the high concentrations found, as well as the lack of response on the root causes of the failure of the control system from the control bodies involved in those contaminations, which are under the supervision of the Indian competent authority, and the inappropriate corrective measures taken by those control bodies and the competent authority, jeopardise the robustness of the controls and the supervision itself. In addition, on the basis of information received by the Commission, it appears that some of the control bodies involved in those OFIS notifications did not respect the scope of recognition of India as regards the products that may be imported into the Union. For all those reasons and in accordance with Article 3, point (a), of Delegated Regulation (EU) 2021/1342, the following control bodies should not appear in the list of control bodies recognised by the Indian competent authority: ‘CU Inspections India Pvt Ltd’, ‘Ecocert India Pvt Ltd’, ‘Indian Organic Certification Agency (Indocert)’, ‘Lacocert Quality Certifications Pvt Ltd’ and ‘OneCert International Private Limited’.”

Currently, India is been recognized for equivalence purposes concerning unprocessed plant products, vegetative propagating material, and seeds for cultivation. However, this recognition is set to expire at the end of 2026. The competent authority in India overseeing this recognition is the Agricultural and Processed Food Products Export Development Authority (APEDA). Currently, 20 control bodies are recognized and authorized to conduct controls and certifications based on India's National Programme for Organic Production²⁴.

For live animals, unprocessed animal products, and processed agricultural products intended for export from India to the EU market, there are currently five control bodies recognized by the European Commission²⁵. However, this recognition is set to expire by the end of this year. Therefore, these control bodies must be re-recognized by the European Commission, but then assigned to the first category in the list (compliance) by the beginning of next year. Failure to do so will result in the inability to export unprocessed animal products or processed agricultural products for use as food and feed into the European Union.

Organic Equivalency with the USA:

In 2006 USDA AMS – US Department of Agriculture-Agriculture Marketing Service (AMS) acknowledges the conformity assessment system of APEDA – Agricultural and Processed Food products for Export Development Authority was considered sufficient to ensure technical standards of USDA NOP and hence allowed for accreditation of organic certification bodies (31).

²³ Regulation (EU) 2021/2325, „whereas“ Nr. 9

²⁴ Regulation (EU) 2021/2325, Annex I

²⁵ Regulation (EU) 2021/2325, Annex II

In 2021, the USDA Agricultural Marketing Service (AMS) National Organic Program (NOP) ended its recognition agreement with India's Agricultural and Processed Food Products Export Development Authority (APEDA). The recognition agreement allowed APEDA to accredit certifiers to provide USDA organic certification in India. This change adapts to the evolution of organic supply chains over time and allows AMS to protect its certified farms and businesses around the world (32).

Transition period of 18 months

Upon ending the recognition agreement, AMS provided an 18-month transition period for Indian organic operations that were certified USDA organic by an APEDA-accredited certifier under the recognition to become certified directly by a USDA-accredited certifier. That transition period ended on July 12, 2022.

Private Labelling in Germany

Organic associations have their own standards. As a result, members have to meet also the requirements of this associations in addition to that of EU legislation. The farms of organic associations usually have to convert to fully organic production. Adherence to both EU regulations and the association's specific requirements for managing the entire holding is typically mandatory. This requirement is commonly shared among all organic associations.

Some organic associations have also social standards which govern social provisions for employees, ban child labour and promote equality, amongst other things. In contrast, comparable requirements regarding social standards are missing in the EU legislation for organic production and labelling.

In Germany, logos from organic associations can be used on organic products additionally. To be able to utilize such logos, the association require from the operator to be a member of their association. Controls to verify, whether the members meet the requirements of the association are also carried out by the control bodies and in combination to the controls on the basis of EU legislation. Only those control bodies that are also registered with the associations may carry out those controls using the inspection report provided by the associations. After the inspection, the control body sends back the finalized inspection report. Certification regarding the standards set by the organic association is then undertaken by the association itself, subsequent to receiving the completed inspection report from the control body.

Private Labelling in India

Private standards are prohibited in India and are not acknowledged under the new regulation of 2017 (13). This regulation affirms the recognition of NPOP and PGS India, both of which adhere to the National Standards of Organic Production (NSOP). Despite the potential for private standards such as Vedic farming or Jain farming, they are presently unrecognized by the Government of India.

General Requirements Regarding Controls of Operators in Germany

In any case, all operators and groups of operators [with exceptions for retailers] shall be subject to a verification of compliance at least once a year. The verification of compliance shall include a physical on-the-spot inspection. If the previous controls of the operator concerned have not revealed any non-compliance affecting the integrity of organic or in-conversion products during at least three consecutive years and the operator or group of operators concerned has been assessed as presenting

a low likelihood of non-compliance. In this case, the period between two physical on-the-spot inspections shall not exceed 24 months²⁶.

Annual verification



Regarding organic plant production, the annual verification includes the

- bookkeeping including invoices and delivery notes regarding incoming and outgoing goods and their labelling,
- documentation of the utilization of plant protection products, fertilizers, plant reproductive material,
- mass balance and traceability checks,
- verification of the description of the production units including fields, facilities, storage of plant protection products, fertilizers, plant reproductive material and harvested products,
- verification of the measures described and implemented by the operator to fulfill all requirements, such as those aimed at preventing the mixing of products or contamination with unauthorized substances, including precautionary measures.

During a physical on-the-spot inspection, an appropriate portion of the fields must be visited to validate the plausibility of the description of the production unit(s) and all activities outlined by the operator. This assessment should consider the crops being cultivated and the number and size of new fields under the operator's production.

In the operator's facilities and storage areas, it is necessary to verify whether the measures described by the operator are suitable and adequate. If the operator manages both organic and non-organic production units, it should be ensured that clear separation measures have been implemented, which are understandable even to third parties not directly involved.

Unannounced inspections during harvest time in the fields, particularly for operators managing both organic and non-organic production units, should be incorporated into the annual control plan.

Minimum percentages

Moreover, the following minimum percentages regarding controls and sampling have been defined²⁷:

- minimum 10 % of all official controls of operators or groups of operators shall be carried out without prior notice every year;
- minimum 10 % of additional controls shall be carried out every year;
- minimum 5 % of the number of operators shall be subject to sampling every year;
- minimum 2 % of the members of each group of operators shall be subject to sampling;

²⁶ Reg. (EU) 2018/848 art. 38 par. 3

²⁷ Reg. (EU) 2021/279 art. 7

- minimum 5 % of the operators that are members of a group of operators, but not less than 10 members, shall be subject to re-inspection every year. Where the group of operators has 10 members or less, all members shall be controlled.

Elements of the Risk Assessment

Additional controls, unannounced inspections, and samplings must not only adhere to the minimum percentages outlined in the chapter “General Requirements Regarding Controls of Operators”, but they must also be conducted in accordance with the risk of non-compliance.

When evaluating this risk, the following elements must be considered²⁸:

- the type, size and structure of the operators and groups of operators
- the length of time during which operators and groups of operators have been involved in organic production, preparation and distribution;
- the results of the controls performed;
- the point in time relevant for the activities carried out;
- the product categories;
- the type, quantity and value of products and their development over time;
- the possibility of commingling of products or contamination with non-authorised products or substances;
- the application of derogations or exceptions to the rules by operators and groups of operators;
- the critical points for non-compliance and the likelihood of non-compliance at every stage of production, preparation and distribution;
- subcontracting activities;
- any information indicating the likelihood that consumers might be misled, in particular as to the nature, identity, properties, composition, quantity, durability, country of origin or place of provenance, method of manufacture or production of food;
- the reliability and results of own controls that have been performed by the operators, or by a third party at their request;
- any information that might indicate non-compliance with the rules.

In Germany every Control Body has its own procedures to assess the risk of non-compliances. However, other EU Member States have implemented standardized procedures to analyse non-compliance risks and set additional minimum percentages for additional controls or sampling based on the determined score.

Exchange of Information

Competent authorities shall **immediately** share information with other competent authorities, as well as with the Commission, on any suspicion of non-compliance that affects the integrity of organic or in-conversion products²⁹. The competent authorities shall use the Organic Farming Information System (OFIS) to exchange information with the Commission and other Member States. The Member State notified shall reply **within 30 calendar days** from the date of receipt of the notification and shall inform about the actions and measures taken, including the results of the official investigation and provide any other information available and/or required by the notifying Member State.³⁰

²⁸ Reg. (EU) 2018/848 art. 38 par. 2 and Reg. (EU) 2017/625 art. 9

²⁹ Reg. (EU) 2018/848 art. 43 par. 1

³⁰ Reg. (EU) 2021/279 art. 9 par. 1 lit. a

In cases where suspected or established non-compliance has been identified with regard to products under the control of other control authorities or control bodies, control authorities and control bodies shall **immediately** inform those other control authorities or control bodies³¹.

In order to respond promptly and proportionately, all institutions must minimize the time required for exchanging information and conducting official investigations in cases of suspected or confirmed non-compliances.

Mass Balance and Traceability Checks

Comparing the amount of raw materials inputted into a process with the outputs produced, including also raw materials and outputs stored to identify potential significant discrepancies between the expected and actual outputs is regarded as compulsory measure within controls. These mass balance checks aim to identify potential significant deviations between expected and actual outputs, signalling the possible utilization of non-organic products, whether such usage was unintentional or fraudulent.

By tracking the flow of materials throughout the chain of custody, the source of any discrepancy can be pinpointed. Furthermore, traceability serves as an additional tool to ensure that the origin of a product can be effectively and swiftly determined. In instances of organic product contamination with unauthorized substances, traceability facilitates the rapid identification of potential contamination sources.

With the latest total revision of EU legislation defining the requirements for organic production and labelling and applying since 2022 specific requirements have also been introduced regarding mass balance and traceability checks (see Chapter EU legislation).

Traceability System in India

Previously, each Certification Body (CB) operated with its own filing systems, creating a significant grey area susceptible to manipulation in certification processes. However, in 2010, APEDA introduced the TraceNet System to address these concerns. This internet-based electronic service mandates the uploading of data until inspection, following which the system generates the Transfer Certificate (TC). TraceNet serves as a tool for stakeholders to facilitate process certification for the export of organic products from India, ensuring compliance with the National Programme for Organic Production (NPOP) and international standards like National Organic Program (NOP) and other standards. It collects, stores, and reports forward and backward traces and quality assurance data entered by operators, producer groups, and certification bodies throughout the organic supply chain in India. This system enhances transparency and discourages illicit practices to some extent.

Under TraceNet, CBs or their operators are required to upload anticipated produce data annually, followed by actual harvest data. Any additional real harvest omitted during the year cannot be added to the TraceNet system, compelling farmers to sell such produce independently without integrating it into the system. The TraceNet data is then facilitated and processed by the Certification bodies. For export purposes, certifying bodies must furnish specific documents such as the Transfer Certificate (TC), Certificate of Inspection (COI), and Produce Transaction Certificate (PTC). However, for domestic transactions within India, only the Transfer Certificate (TC) suffices.

Labelling substituted products as organic presents a significant challenge within the Indian organic sector, as TraceNet currently lacks the capability to effectively address this issue.

³¹ Reg. (EU) 2018/848 art. 43 par. 2

Lab Module within the TraceNet system: Laboratory Sampling & Testing System India

This module facilitates Authorised Laboratories to capture the Sample Collection details and enter the test report. Laboratories can manage their test parameters like Residue Name, Minimum Residue Limits, MRL Units, Pesticides & Chemicals Name with their allowed limits. Based on the Minimum Allowed limits for different products and importing countries, the system shall detect whether the test has passed or failed and generate the Test Report.

This module facilitates the management of Pesticide, Residue and Chemicals and their limits, Sample collection details, Test report entry, Generation of Test Report and MIS Reports. Typically, certifying bodies in India are required to test for around 525 molecules before exporting products from the country. Laboratory accreditation has three layers – ISO standards, NABL certification and APEDA approval.

Inspection requirements for the Production group

In the PGS India system, the group is an informal collective of 5 or more organic farmers. The group registers with the Regional Council by filling registration form online in PGS India portal. A peer appraisal is conducted on each farmer's farm by a team of minimum 3 members within the group for every cropping season. The team fills the peer appraisal form and recommends the farmer for organic certification based on compliance.

In the NPOP certification system, for group certification, the group is legally registered entity. The accredited Certification Bodies shall follow Standard inspection procedures as per ISO19011. The group approaches an external inspection and certification agency for conducting annual inspection of the individual group / unit. The group develops an internal quality system (IQS) constituting of functional internal control system (ICS), qualified personnel for maintaining the ICS, internal standards and procedure. At least two inspections of the group (one in each growing season of each crop) shall be carried out by the internal inspector (appointed staff) and will be documented annually.

Traceability Checks

In the PGS India system, the Processing/ Aggregating unit applies for organic certification as processing unit for processor certification to the RC. The Processing unit is audited annually by the RC as per the NSOP standards of Processing. The raw material (produce) has to be transferred to the processing unit from Local Group/ Processing operator using Transaction Certificate as recorded in PGS India portal. Traceability is maintained online by recording all the transactions in PGS-India portal

In the NPOP certification system, the Processing/ Aggregating unit applies for organic certification as an operator to the certification agency. The Processing unit is audited annually by the certification agency as per the NSOP standards of Processing. The raw material (produce) has to be transferred to the processing unit from Farmers/Grower Group/ Processing operator using Transaction Certificate as recorded in TraceNet. Traceability is maintained online by recording all the transactions in the TraceNet portal.

Surveillance, Audits of certifying bodies (33)

The Certification Bodies shall have laid down policy and procedure on inspection methods and frequency which shall be determined by intensity of production, type of production, size of operation, outcome of previous inspections and the operator's record of compliance, any complaints received by the programme, whether the unit or operator is engaged only in certified production, contamination and drift risk, complexity of production.

a) Announced annual Inspections:

Inspection of certified operators, sub-contracted operators or units takes place at least once annually. Timing of inspections shall not be so regular as to become predictable.

b) Unannounced Inspections:

The selection of operators for unannounced inspection shall be based on risk analysis carried out by the Certification Body annually. Minimum 10% of unannounced inspections is to be carried out annually by the Certification Bodies.

Elements of Risk Assessment

A minimum sample size of the members in the grower group shall be inspected by the accredited Certification Body. The sample size shall be determined as square root of the number of members registered in the grower group. Based on the risk assessment made by the accredited Certification Body prior to the inspection visit, the number of sample inspections shall be planned. The risk assessed by the accredited Certification Body shall be documented.

The accredited Certification Body shall establish criteria for assessment risk under high, medium and low categories.

High risk: 2 X square root of number of farmers

Medium risk: 1.5 X square root of number of farmers

Low risk: square root of number of farmers

Based on the procedure of risk assessment, 10% inspections are required to be carried out by the Certification Body annually in addition to the unannounced inspections (34).

The details given apply to all operators including Grower Groups.

The Supervision of the Control Bodies in Germany

Control bodies are private companies and therefore engage in competition with one another. This competitive environment often fosters greater flexibility compared to public control authorities managed by the state, particularly regarding resources, staff, and innovation. However, this competition can potentially weaken the control system, as some control bodies may offer certification at lower fees in order to attract more clientfffs. Consequently, other control bodies may feel compelled to reduce their fees as well, leading to a decrease in the allocation of personnel and other resources, thereby compromising the effectiveness of the control system.

To mitigate the adverse effects of competition, it is essential to implement an adequate system of oversight.

For the supervision of control bodies competent authorities have to verify that the delegated tasks are carried out effectively, independently and objectively, in particular as regards the intensity and frequency of the verification of compliance as laid down in EU legislation³².

Witness Audits

One method for verifying the adequacy and effectiveness of controls conducted by control bodies is through witness audits. During these audits, the inspector from the control body is accompanied by a representative from the competent authority of the federal state. The selection of controls subject to

³² Reg. (EU) 2018/848 art. 40 par. 1 lit. b

witness audits is based on risk assessment. Control bodies are required to provide the planned dates and times of these controls to facilitate selection.

Risk factors considered for selecting controls for a witness audit may involve identified risks or non-compliances at the operator level, as well as risks more closely associated with the control bodies or the inspectors themselves. Control bodies demonstrating weaknesses in their control systems or inspectors with less experience are prioritized for witness audits to assess their competence, behaviour, and level of training in fulfilling their responsibilities. The competent authority utilizes its own inspection report to evaluate the effectiveness of the inspector's control measures.

Review Audits

Another form of audit conducted by competent authorities is the review audit, wherein an operator undergoes direct scrutiny without the presence of the control body's inspector. This type of audit is pertinent when non-compliances detected by other institutions suggest a weak control system. Additionally, it serves as a useful tool for comparing findings in the inspection report of the control body with those of the competent authority.

In contrast to witness audits, the behaviour of the inspector is not influenced in a review audit, minimizing potential bias and ensuring consistency with inspections conducted without accompaniment. However, while a review audit does not assess the competence and behaviour of the inspector, the operator may undergo the same type of control for a second time.

Office audits

Competent authorities are mandated to organize audits of control bodies to whom they have delegated official control tasks or other related activities, at least once a year. In Germany, these audits are conducted by the central competent authority at the premises of the control body. The objective is to verify the adequacy of procedures and evaluate their implementation. The competent authorities of the federal states assist the central competent authorities by forwarding cases indicating potential weaknesses in the control system of the control bodies to be audited. Such cases aid in investigating the functionality and effectiveness of the implemented procedures.

Furthermore, the request and review of inspection reports, risk analyses, and other relevant documents, such as notifications of non-compliances or suspicions, irrespective of their source, constitute another form of office audit. This approach serves as an efficient tool for identifying potential weaknesses in the control system of a control body.

Annual reports

Once a year, member states of the EU have to submit information and data regarding their control and certification system³³. The requested data must be reported for each control authority or control body and include the following:

1. The number of operators inspected annually.
2. The number of routine annual controls conducted.
3. The number of additional risk-based controls performed, including the total.
4. The number of unannounced controls conducted.
5. The total number of controls carried out.
6. The number of samples taken for testing.
7. The number of samples with detected contamination.

³³ Reg. (EU) 2019/723 art. 2 in conjunction with Annex Part II Section 9

Furthermore, the report should detail the number of non-compliances identified per control authority or control body, categorized accordingly, along with the measures taken to address established non-compliances.

Additionally, each member state is required to provide data on the number of supervision audits conducted in relation to the total number of active control bodies within their jurisdiction.

Finally, member states must describe in the report the actions and measures implemented by competent authorities during the reporting year to ensure the effectiveness of official controls conducted by control authorities and/or control bodies.

Exchange of Information

Cooperation with accreditation bodies

Competent authorities that have delegated certain official control tasks to control bodies shall organise audits or inspections of such bodies, as necessary and avoiding duplication, taking into account any accreditation³⁴. The audits of control bodies by accreditation bodies are carried out on the basis of the norm ISO/IEC 17065. These audits primarily focus on evaluating the impartiality, independence, competence, and training of staff, as well as other resources. The aim is to verify whether the described procedures are adequate. It's worth noting that the scope of these audits extends beyond the control and certification system specifically related to organic production and labelling. Instead, it encompasses all other control and certification systems requiring accreditation, including activities conducted in other countries.

Competent authorities shall exchange information on the supervision of the control bodies with national accreditation bodies³⁵, not only with the aim to reduce duplication (see above), but also to use their resources more efficiently and to be able to cooperate in the event of deficiencies or non-compliances.

Suspected or established non-compliances

In cases where suspected or established non-compliance has been identified with regard to products under the control of other control authorities or control bodies, control authorities and control bodies shall immediately inform those other control authorities or control bodies³⁶.

On the National Level, the different institutions involved in the German certification system shall exchange such information via E-Mail.

OFIS

On the International Level, the competent authorities shall use the Organic Farming Information System (OFIS) to exchange information with the Commission and other Member States, when the suspected or established non-compliance affects the integrity of organic products. Member States shall reply within 30 calendar days from the date of receipt of the notification and shall inform about the actions and measures taken³⁷.

³⁴ Reg. (EU) 2017/625 art. 33 lit. a

³⁵ Reg. (EU) 2018/848 art. 43 par. 5

³⁶ Regulation (EU) 2018/848 art. 43 par 2

³⁷ Regulation (EU) 2021/279 art. 9

The system includes also an alert function to be used in the case of a suspected or established non-compliance of products coming from the notifying Member States.

Import and Controls



Import

In principle, imports of organic products can be divided in four categories:

- the product complies with the objectives and principles, the production rules and labelling requirements laid down in EU legislation for organic production and labelling and the operators have been subject to controls by control authorities of control bodies recognised by the European Commission³⁸. However, the Commission still has not recognised any control authority or control body until now;
- the product comes from a third country which is recognised, that product complies with the conditions laid down in the relevant trade agreement³⁹. However, there are only Chile, Switzerland and United Kingdom are countries with trade agreement with the EU;
- the product comes from a third country which has been recognised for the purposes of equivalence under the former EU legislation. This recognition shall expire on 31 December 2026⁴⁰;
- the product comes from a third country and it has been produced under a control and certification system of a control authority or control bod, which have been recognised as equivalent under the former EU legislation. This recognition shall expire on 31 December 2024⁴¹.

Most organic products to be imported can be assigned to the last category mentioned.

³⁸ Regulation (EU) 2018/848 art. 45 par. 1 lit. b) roman i) in conjunction with art. 46 of this Regulation

³⁹ Regulation (EU) 2018/848 art. 45 par. 1 lit. b) roman ii) in conjunction with art. 47 of this Regulation

⁴⁰ Regulation (EU) 2018/848 art. 45 par. 1 lit. b) roman iii) in conjunction with art. 48 of this Regulation

⁴¹ Regulation (EU) 2018/848 art. 57

Controls



The competent authorities in the Member States of the European Union are responsible for conducting official controls on consignments imported into the European Union. These controls consist of the following:

- Documentary checks must be performed on all consignments;
- Identity checks are conducted randomly to ensure the authenticity and accuracy of documentation accompanying the consignments;
- physical checks at a frequency depending on the likelihood of non-compliance with the requirements for organic production and labelling⁴².

Documentary checks involve examining the certificate of inspection, all accompanying supporting documents, and, where applicable, the results of analyses or tests conducted on samples taken. The certificate of inspection is issued for every consignment to be imported by the control authority or control body in the country of origin. It must be issued in the TRACES NT system of the European Union by the control authority or control body in the origin country. TRACES NT is the European Commission's online platform for animal and plant health certification required for the importation of animals, animal products, food and feed of non-animal origin and plants into the European Union, and the intra-EU trade and EU exports of animals and certain animal products. Competent authorities in the Member States are then responsible for conducting official controls within this system.

Therefore, both the control authorities or control bodies in the origin country issuing the certificate and the competent authorities in the Member States of the EU require access to the TRACES NT system.

Contamination, Sampling and Analyse

The latest Regulation concerning organic production and labelling has introduced a series of measures aimed at preventing contamination with substances and products not authorized in organic production. These measures are to be implemented at the operator's level in the event of contamination with such unauthorized substances or products, or in cases of suspicion thereof⁴³.

⁴² Regulation (EU) 2021/2306, art. 6 par. 1

⁴³ Regulation (EU) 2018/848 art. 28

Furthermore, this Regulation provides more precise descriptions regarding the official investigations to be conducted by control bodies or competent authorities in the event of the presence of such unauthorized substances or products⁴⁴.

Sampling

Moreover, official controls must also encompass sampling and analysis of organic products at a minimum percentage, as outlined in the Minimum percentages chapter. These samplings and analyses should be risk-based, focusing on unauthorized products, substances, and procedures. Additionally, they should complement those conducted during follow-up audits. Examples of products and substances subject to analysis include plant protection products, genetically modified organisms, as well as food additives and processing aids not permitted for use in the production of processed organic food. Furthermore, analysis may be conducted to identify non-allowed production techniques.

In case of organic products to be imported, physical checks at a frequency depending on the likelihood of non-compliance with the requirements for organic production and labelling shall be part of the official controls to be carried out before releasing the consignment to be imported for free circulation⁴⁵.

Additionally, the Directorate-General for Agriculture and Rural Development (DG AGRI) of the European Commission has published a list in recent years identifying certain products from specific countries as being at high risk of contamination with substances not authorized for use in organic production. In 2024, an adequate number of samples should be taken from the following products originating from the specified countries before releasing the consignment for free circulation:

Table 4 Samples to be Taken from Certain Products from Certain Countries 2024 (DG Agri)

Product	Country
ginger	China, Peru
tee	China
peanuts	Egypt
turmeric	India
citrus fruits	South Africa
dates	Tunisia

⁴⁴ Regulation (EU) 2018/848 art. 29

⁴⁵ Regulation (EU) 2021/2306 art. 6 par. 1 lit. c

Analyse



To determine whether organic products are contaminated with plant protection products, a "multi-residue method" is typically chosen for analysis. However, in certain cases, a "single-residue test" may also be considered, particularly if specific weather conditions negatively impact organic production due to the absence of suitable plant protection products.

In the event of findings indicating the presence of products, substances, or production techniques not authorized in organic production, an official investigation is conducted by the control body in collaboration with the competent authority. The product concerned has to be separated and the operator shall not place the product concerned on the market as an organic or in-conversion product and not use it in organic production unless the suspicion can be eliminated⁴⁶

Comparison in a Nut Shell

Particulars	German Organic Certification System	Indian Organic Certification System	
	Export of organic products in Germany is not relevant. There is only one common system.	Organic Certification- Domestic	Organic Certification-Exports
Area under Organic Certification (Area in Hectares)	2022: 1.9 million Ha	2022: 4.7 million Ha (7)	
No. of Organic Producers	2022: 36,912 (farmers)	2022: 2.5 million (farmers) (7)	
Major Government program/schemes/subsidies supporting organic farming	<ul style="list-style-type: none"> • Conversion Counselling • Sales Promotion Measures • Trade fair and exhibition Promotion • Promotion on organic value chains • Funding mass catering sector • Supporting investments • Demonstration farms • Model regions 	<ul style="list-style-type: none"> • Paramparagat Krishi Vikas Yojana (PKVY) <ol style="list-style-type: none"> 1. Bhartiya Prakritik Krishi Padhati (BPKP) • Mission Organic Value Chain Development for North East Regions (MOVCD-NER) 	The Financial Assistance Scheme (FAS) <ul style="list-style-type: none"> • Development of Export Infrastructure • Quality Development <ol style="list-style-type: none"> 1. Certification of Quality and Food Safety Management Systems 2. Training in India and abroad to be implemented by APEDA 3. Testing of water, soil, residues of agrochemicals/pesticide, veterinary drugs, hormones, toxins, heavy

⁴⁶ Regulation (EU) 2018/848, art. 29 par. 1

			<p>metals, microbial count etc. in APEDA scheduled products</p> <ol style="list-style-type: none"> 4. Laboratory for export testing and in-house lab equipments: 5. Introduction of new plant / seed / germplasm varieties for export oriented / varieties suitable for processing potential produce. <ul style="list-style-type: none"> • Market Development.
Subsidy Rate INR/ ha	Higher during conversion period than after that. The rate depends also on the crop. e.g. arable land, first 2 years: 38,230 INR / ha and year After 2 years: 25,668 INR / ha and year	Farmers are provided financial assistance of INR 10,333/ ha per year continued for 3 years under PKVY and INR 10,833/ ha per year continued for 3 years under MOVCDNER for organic inputs such as seeds, bio-fertilisers, bio-pesticides, organic manure, compost/ vermi-compost, botanical extracts etc	For the financial assistance under each component refer to the text on Page
Non-compliance wrt subsidies	In case of non-compliances, which effect the integrity of the organic products or fields, subsidies have to be paid back	None	In case of non- implementation or deviation of the project as per the IPA/MoU, APEDA may cancel the approval granted for the project and the beneficiary shall be liable to refund the entire amount (including processing fee) with interest @ 10% per annum to APEDA from the date of release of assistance.
Operational structure name under Certification	certification system pursuant to art. 34 of Regulation (EU) 2018/848	Participatory Guarantee Systems PGS India following NSOP	Third Party Certification under NPOP following NSOP
Functions of competent authority at national level	Federal Ministry of Agriculture confers tasks to, Federal Agency for Agriculture and Food tasks: Registration Withdraw Office Audit annually Authorize usage of non-organic products not listed in Annexes	National Centre for Organic and Natural Farming (NCONF)	Agricultural and Processed Food Products Export Development Authority (APEDA)
Functions of competent authorities at states level	Witness Audits Review Audits	Regional representation in the NAC (see below). No direct State Authority function.	Commodity Boards (Tea Board, Coffee Board, Spices Board). Other than this no State level Authority function.
Central Authority	Federal Agency for Agriculture and Food	PGS National Advisory Committee (NAC): comprising of Joint Secretary (INM) DAC , Director NCOF, Regional Director RCOF I , Regional Director RCOF II , Additional Commissioner , Dy Commissioner (INM) DAC , Head Zonal Councils/(s) , Representatives of RC (North) , Representatives of RC (South) , Representatives of RC (East) , Representatives of RC (West) , Farmer's representatives (4, one from each region) , consumers representatives	National Accreditation Board (NAB) (National Steering Committee): comprising of representatives from Ministry of Agriculture, Ministry of Commerce and Industry, APEDA, Coffee Board, Spices Board and Tea Board.
Authority Division	National Authority for recognition of Certifying bodies and Federal States responsible in case of non-compliances, which effect	National and to some extent Regional Authorities for recognition of Regional Councils	National Authority for recognition of Certification and Inspection bodies

	the integrity of the organic products or fields, departments of agriculture are the paying agencies and have also to decide, in which case subsidies have to be paid back		
Facilitating Agency	<p>Departments of Agriculture: In Bavaria, there are 32 departments of agriculture, which are responsible for the application and payment of the subsidies.</p> <p>In case of non-compliances, the competent authority of the federal states supports these paying agencies to decide on the reduction of payments.</p>	<p>Regional Council:</p> <ol style="list-style-type: none"> 1. The organisation is legally registered under any legal act such as Society Act, public trust act, Cooperative act or Companies act with government. 2. The organisation has proven record on promotion of agriculture and organic management practices along with other infrastructure and personnel requirements. 	<p>Certification and Inspection agency:</p> <ol style="list-style-type: none"> 1. The organisation is legally registered under any legal act such as Society Act, public trust act, Cooperative act or Companies act with government. 2. The organisation complies with ISO Guide 65
No. of recognised Certifying Bodies	19 Control Bodies	<p>Not Applicable.</p> <p>Active 74 Regional Councils</p>	<p>According to the Regulation (EU) 2021/2325, for the unprocessed plant products, vegetative propagating material, and seeds for cultivation: 20 Control Bodies</p> <p>For the animals, unprocessed animal products, and processed agricultural products: 5 Control Bodies</p> <p>According to last updated list by APEDA on 11.03-2024, there are 25 certification bodies for the NPOP, Crop Production, Processing and Handling</p>
Supervision of the Control Bodies	Central competent authority (BLE), competent authority of the federal state	National Advisory Committee (NAC) and Zonal Council (NC)	National Accreditation Board (NAB)
Facilitating Agency Administration/ Paying Agency	<p>Paying agencies are part of the public administration. As a result, no application is necessary.</p> <p>The tasks related with the subsidies are conferred by the ministry of the federal state.</p>	<ol style="list-style-type: none"> 1. The application of the applicant is processed and their authenticity is verified by the NAC and Zonal Council (ZC). 2. The applicant is authorised as Regional council by PGS-NAC, PGS Secretariat (currently NCONF) and ZC for a validity period of 3 years. 3. The authorization is renewed by NAC post receipt of application by the RC based on the recommendation and surveillance report of ZC and NCONF. 	<ol style="list-style-type: none"> 1. Field evaluation conducted by the Executive committee nominated by the NAB for applicants. 2. The applicant is accredited as a certification and inspection agency by NAB for a validity period of 3 years. 3. The accreditation is renewed by APEDA on behalf of NAB post receipt of application for renewal. The renewal shall be based on the past performance of the Inspection and Certification Agency and APEDA has the right to renew or reject such applications, at their absolute discretion.
Inspection requirements : Production group & Conformity Assessment process	<p>No official group operator certification system in Germany at the moment, although requirements apply since beginning 2022.</p> <p>The requirements are regarded as too complicated. The bureaucratic burdens are regarded by the farmers as too high, as they have to set up a legal entity.</p>	<ol style="list-style-type: none"> 1. The group is an informal collective of 5 or more organic farmers. 2. The group registers with the Regional council by filling registration form online in PGS India portal 3. A peer appraisal is conducted on each farmer's farm by a team of minimum 3 members within the group for every cropping season 4. The team fills the peer appraisal form and recommends 	<p>In case of Group Certification</p> <ol style="list-style-type: none"> 1. The group is legally registered entity. 2. The group approaches an external inspection and certification agency for conducting annual inspection of the individual group / unit 3. The group develops an internal quality system (IQS) constituting of functional internal control system (ICS), qualified personnel for maintaining the ICS,

	<p>There are structures, similar to those of a group of operators.</p> <p>Such structures have been implemented for example in cases of small-scale farmers managing old fruit orchards.</p> <p>In these structures, the farmer acts like a subcontractor of the wholesaler. He is the owner of the parcels. However, from a legal point of view, on a basis of a contract, the wholesaler is the owner of the yield of these fruit orchards and is responsible for ensuring, that all requirements are met by the farmers under his contract.</p> <p>These structures also aim to the conservation of the traditional landscape and is mainly located in South Germany.</p>	the farmer for organic certification based on compliance.	<p>internal standards and procedure</p> <p>4. 3. At least two inspections of the group (one in each growing season of each crop) shall be carried out by the internal inspector (appointed staff) and will be documented annually</p>
Processing and Post-Harvest Traceability System/ Organic Integrity	<p>Traceability on the level of operators is expected and verified within the controls of the control bodies</p> <p>There is no central system.</p> <p>Regarding import, there is TRACES NT.</p>	<p>The Processing/ Aggregating unit applies for organic certification as Processing unit for processor certification to the RC.</p> <p>1. The Processing unit is audited annually by the RC as per the NSOP standards of Processing</p> <p>2. The raw material (produce) has to be transferred to the processing unit from Local Group/ Processing operator using Transaction Certificate as recorded in PGS India portal.</p> <p>3. Traceability is maintained online by recording all the transactions in PGS-India portal</p>	<p>The Processing/ Aggregating unit applies for organic certification as an operator to the certification agency.</p> <p>1. The Processing unit is audited annually by the certification agency as per the NSOP standards of Processing</p> <p>2. The raw material (produce) has to be transferred to the processing unit from Farmers/Grower Group/ Processing operator using Transaction Certificate as recorded in TraceNet.</p> <p>3. Traceability is maintained online by recording all the transactions in the TraceNet portal</p>
Surveillance, Audits of control bodies to be carried out by competent authorities	<p>Witness Audits, Review Audits, Office Audits</p>	<p>As mentioned in the section on Inspection requirements : Production group & Conformity Assessment process</p>	<p>a) Announced annual Inspections</p> <p>b) Unannounced Inspections: The selection of operators for unannounced inspection shall be based on risk analysis carried out by the Certification Body annually. Minimum 10% of unannounced inspections to be carried out annually by the Certification Bodies.</p>
Risk based controls by Control Bodies	<p>Risk assessment, to identify the specific risk elements and the risk level of non-compliances within the organic production of an operator.</p> <p>Minimum percentages regarding additional controls, unannounced inspections and sampling.</p>	<p>As mentioned in the section on Inspection requirements : Production group & Conformity Assessment process</p>	<p>The accredited Certification Body shall establish criteria for assessment risk under high, medium and low categories.</p> <ol style="list-style-type: none"> 1. High risk: 2 X square root of number of farmers 2. Medium risk: 1.5 X square root of number of farmers 3. Low risk: square root of

		number of farmers	
		Based on the procedure of risk assessment, 10% inspections are required to be carried out by the Certification Body annually in addition to the unannounced inspections	
Laboratories facilities	"Official Laboratories" "National Reference Laboratory"	<p>Food Testing and analysis is an essential part of the food safety ecosystem to assure that the food is safe to consume. For the same, FSSAI recognizes and notifies NABL accredited food laboratories under Section 43 of FSS Act, 2006.</p> <ol style="list-style-type: none"> 1. Primary food laboratories: 215 laboratories and research institutions (as of list dated 12.12.2023) 2. Referral food laboratories: Presently there are 20 referral food laboratories (as of list dated 01.07.2022) 3. National Reference Laboratories: Presently there are 11 NRLs and 2 ANRLs (as of list dated 25.08.2023) <p>Laboratory accreditation has three layers namely with ISO standards, NABL certification, FSSAI recognised / approved</p>	
Private labelling	Allowed	Not Allowed	Not Allowed
Organic Information sharing and exchange system	TRACES NT OFIS OFIS2 RASFF AAC	Indian Organic Integrity Database	https://jaivikbharat.fssai.gov.in
		NCONF Website	APEDA website

Challenges

Challenges regarding the Control and Certification System in Germany

As demonstrated earlier in the chapter "The Institutions Involved in the Control and Certification System in EU and Germany", the complexity of this system within the 27 member states, and particularly in Germany with its 15 competent authorities and 19 control bodies, is considerable. The implementation methods can vary significantly, involving a large number of institutions in overseeing the organic market and operating within the control and certification system. Consequently, this diversity can impact fair competition among operators involved in the organic market.

Differences in the implementation of EU legislation by these institutions may further affect consumer confidence in organic products. Therefore, ensuring consistency and coherence in the application of regulations across all entities involved is crucial to maintain trust and transparency in the organic market.

The repeal of the old regulation and its associated secondary laws at the end of 2021 led to a significant increase in regulations, as illustrated in the "EU legislation" chapter. The aim of the EU institutions in enacting this measure was to minimize individual interpretation among the institutions involved in the control and certification system across EU member states, thereby harmonizing regulations to mitigate negative impacts on fair competition among operators in the organic production market. However, managing such a complex set of rules can present challenges for both operators in the organic market and the institutions involved in the control and certification system. Balancing compliance with these regulations while ensuring efficiency and effectiveness in oversight requires careful coordination and adaptation by all stakeholders.

Similarly, coordination among the institutions engaged in the control and certification system is becoming increasingly crucial. This coordination occurs primarily between competent authorities at the first level and extends to coordination between competent authorities and control authorities or

control bodies at the second level. Such coordination ensures effective implementation of regulations, facilitates information exchange, and promotes consistency in enforcement across the organic production sector.

In Germany, coordination efforts are facilitated through a Standing Committee, which convenes at least twice a year, utilizing both on-site meetings and video conferences. The committee comprises representatives from the competent authorities of the federal states, the central competent authority, and, where applicable, the accreditation body. Additionally, members from control body associations or a representative from a key stakeholder in the organic food industry of Germany may be invited to participate in these meetings, particularly for discussions on specific topics.

During these meetings, the Standing Committee addresses cases and issues that fall within the purview of the competent authorities or control bodies, aiming to reach a consensus or solution collectively. However, it's important to note that the Standing Committee hasn't been established through legislation. Consequently, while the results and solutions are agreed upon by the competent authorities through voting, they are not legally binding.

Overall challenges in Indian Organic Agriculture

- Finding suitable organic seeds poses a significant challenge due to their high cost, compounded by the added risks of pests and unpredictable weather conditions for both farmers and FPOs.
- The absence of dedicated organic markets exacerbates the difficulty in selling produce.
- Limited understanding of organic tools and practices hinders adoption.
- Ensuring a consistent market for organic products proves challenging.
- During the conversion period (2-3 years), yields are typically low, with no premium prices for products.
- Certification and inspection costs are prohibitively high, particularly for exports.
- Inadequate infrastructure, including roads, cold storage, and processing facilities, hampers operations.
- The organic product value chain suffers from fragmentation and lack of organization.
- Organic farming requires more labor input compared to conventional methods.
- Inconsistent product quality due to the absence of standardized bio manures and inputs.
- Availability issues with organic fertilizers and pesticides persist.
- Insufficient government financial support for certification, research, and development.
- The practicality of meeting the demands of a growing population while maintaining economic viability remains uncertain.

Challenges in India from the Farmers, Farmer Producer Organisations/ Companies and NGOs perspective

- **Small Farmers:** The rules, regulations and organic certification system in India are not designed for the small holder farmers. For many small holder spice farmers, legal documents are not in order and perfect, hence land records are a big challenge especially in the forested and hilly regions.
- **Group Certification:** In group certification, the system doesn't allow the individual to sell its produce as Organic alone and would need approval from the Group certifier by giving a TC – Transfer Certificate.

- **Certification for a particular crop:** If a certain private company deals with spices and supports group certification, and all its farmer groups are certified only in spices and not in other crops. So, if the certified farmer from these certified groups is doing all crops under organic practices, then he or she cannot sell other crops from their multi-cropping farm system with organic certification as “Organic”. For example, farmers in a spice private limited, has certification for pepper but no certification for crops like banana, tapioca etc which becomes a big challenge for the farmer as he/ she cannot sell their bananas as organic.
- **Cost of Certification:** Cost of Certification for the international market is very high for individual small holder farmers and their FPOs. Group of farmer’s certification through FPOs, NGOs or Private Companies seem to be the only feasible option. And yet they are currently finding it a costly process.
- **Lack of Farmer education and trainings:** There is a good window for the international export potential for the FPOs and FPCs, but the understanding of the legalities and the documentation for the international export is challenging for the Farmers Cooperatives and FPOs. There is an urgent need for such training modules. Government initiated such trainings are less in number while the trainings from few private companies are available and accessible to FPOs and FPCs. Knowledge and trainings regarding PGS is not accessible to the common community at large in the rural areas of India, where most of the production takes place. Regional Councils for the PGS India in some locations in Rajasthan are inactive.
- **Cancellation of Equivalency Impact:** Since 2020, with the EU regulations becoming strict, the entire certification system in India is under pressure. The Certification bodies start dictating with their own rules under pressure and workload. They are following EU standards but the procedures are different.
- **Volatile International regulations:** Policies and regulations in different countries on organic farming keep on changing with times and incidences. So, one needs to be vigilant and updated continuously.
- **Reduced Premium price:** Currently, globally, organic is no more a niche product but has become a consumer product. Around 10 years back, there was a clear incentive for a good premium price for the organic products but now it is reduced to only 5-10% not more, only then volumes can grow.
- **Co-existence of Organic Farming and GM crops:** While the government has implemented pragmatic interventions to encourage organic farming, there has also been the approval of genetically modified (GM) crops like hybrid Bt cotton (2002), attempted commercialization of hybrid Bt brinjal (2010), and current efforts to commercialize hybrid HT mustard. The Government of India has many times over the years acknowledged to the Technical Expert Committee (TEC) of the Supreme Court the challenges of segregating GM from non-GM crops, noting that small Indian farmers lack the resources to litigate for compensation as their counterparts in the US do.

Coexistence of GM and non-GM crops is being promoted as a way to resolve the conflict over genetically modified crops and create space for both in the same agricultural system. This approach has gained support after the EU- US dispute in the WTO over the EU’s de facto moratorium on the import of GM foods and the studies conducted in the US that assert the

coexistence is possible. The projection of coexistence as a feasible agricultural model is a source of anxiety for developing countries like India. Since the subject of GM crops is already internationalized through the Bio-Safety Protocol of the Convention on Biological Diversity, concepts like Coexistence, Labelling, Identity Preservation and traceability could become international policies that developing countries are compelled to implement. Do developing countries have the capacity to segregate GM crops from non – GM crops, introduce mechanisms to trace food backwards from the store to the farm, and introduce meaningful labelling are the questions that need to be addressed in India if one wants to continue with the co-existence model (35).

With the co-existence model, the Organic farmers, who diligently are maintaining their GM-free status and undergoing rigorous certification processes, are facing a significant threat to their right to remain GM-free and organically certified. This threat not only undermines the rights of all farmers but also jeopardizes the substantial potential of India's organic export sector.

- **Mix-up with weed seeds:** Certain weed seeds are considered as toxic in certain countries and it is very difficult to remove those Weed seeds from a batch of organically grown similar looking seed grain. Eg Some weeds seeds found in Indian Cumin.

Case Study - PDS Organic Spices (36)

PDS Organic Spices, a unit of Peermade Development Society (PDS), a Non-Profit NGO has been exporting Organic Spices from the centre of origin, the Western Ghats in Idukki district of Kerala state since 1998. Since the year 1994, Control Union (CUC) has been their certifying body. As Control Union is now derecognised by EU since Jan 2020, for EU certifications and APEDA has now taken out CUC from NPOP, PDS may need to have 5 certifying bodies to cover various exporting country's certifications like EU, NOP, Briton, Canada, Japan, Korea, etc and private labels such as Naturland, Biosuesse, Demeter, Fair trade, ROC etc. These are in addition to certification for the Processing factory like BRC, ISO etc. To cover all these certifications, PDS has Control Union, IndoCert, Aditi, Lacon, Flocert, Bureau Veritas & BIS. So one might wonder why they need to have so many certifying bodies.

For dealing with agricultural commodities, there are two categories – 1. Category A certification: Certification of the farms 2. Category D certification: Certification for the processing of the farm produce. Problem is for PDS to get the European Union certification as of today, category A is done by Aditi as they do not have facilities required for dealing with category D. So PDS was forced to take another CB – IndoCert as they have facilities for dealing with category D for processing. But these two CBs do not have the entire NPOP system of certification. Earlier CUC was the only one who had NPOP entire system along with category A and D. But as it was de-listed, PDS finds alternative with Lacon who has the NPOP system and category D certification. Though the standards under NPOP, NOP- USDA and EU are all the same but NPOP has no equivalency with both NOP and EU though, the rules and regulations or the procedures followed by all these certifying bodies are all different, adding to the existing complexity and costs of certification.

Apart from these third party certifications, Govt of India through APEDA and Spices Board (for spices export) have brought in their quality checks like ETO, irradiation, Sudan, Heavy metals Aflatoxin, Salmonella and have to issue health certificate for spices for exports. All these procedures and third party interventions like sampling, analysis and other procedures has increased the certification and export approval costs by 5-8 times depending on the product (high risk spices). Many a times, the certification and related costs have become more than the cost of the raw materials and become so complex that it's impossible to do business/ exports as pre-2020.

Challenges from the Exporter/ Private Ltds Perspective

The finding of ETO in many shipments and the knee-jerk reaction by all the stakeholders has impacted the entire organic industry in India with the exports to Europe including Germany. The exports to these countries have drastically come down drastically.

- **No clear guidelines for Heavy Metals:** List of pesticides and its molecules with MRLs is very clear in both national and international regulations. But with regards to the heavy metals, it's also about considering the tolerance level. Tolerance level mentioned for a heavy metal by APEDA is different, from the tolerance level defined by EU, and the tolerance expectation from the buyer is usually found to be different. Generally, it's not listed clearly, that xyz are the number of heavy metals that need to be tested and that these are their tolerance levels approved for organic and non –organic commodities. These requirements and these specifications, one discovers at a much later stage, when the shipment is ready.
- **Laboratory compatibility:** The compatibility of accepting the test results of the laboratories in India is the biggest hindrance. The authorities insist on testing back in Germany. For example Eurofins, a European lab and they have branches in India. The authorities would still not accept testing results tested by Europeans in India. But authorities and all stakeholders in Germany would want to test it in Germany in German laboratories even though the laboratories in India and Germany follow the same ISO standardisation. They do not even approve the test results by the German Lab following all Germany led guidelines, and Indian guidelines and testing it in India.
- **Too long liability on Indian Exporters:** Usually, one needs to test in India under any NABL certified and FSSAI accredited laboratories. Still the German authorities get it tested once more at the port. They could pick it up from many possible locations like any shelf in Germany, at the retailer or a distributor. And that happens during the complete duration of the life cycle of the product. Usually, the consignments are vacuum packed with controlled environment and have a shelf life of about 3 years. So, if the authorities pick up a sample before the end of the third year and find some issues then still the exporter in India is considered responsible. Ideally, the liability of the exporter should be gone once the port authority in Germany accepts the consignment. But that's not the case. One needs to prove oneself innocent for the entire duration, continue the traceability checks, hire a consultant and if you are not able to prove it, it will be considered as a compliance issue and one might be barred or suspended. Hence, it has become difficult to work with Germany. It's applicable to whole of Europe but it has become worse in Germany as they are the largest buyers as well.
- **Duration of Sample Testing:** If one tests in India, it takes maximum 8 -10 days for the sample to get it tested. If it's to be tested in Germany, it takes minimum of 1 month. In this one month, there are high chances of the product getting deteriorated and developing changes.
- **Long Waiting Period:** In the current situation, there are only 2-3 Certifying Bodies (CBs) approved in India. The waiting period for certification in these CBs is 6 to 9 months as they are overloaded with work.
- **Costs of Certification:** The costs for certification are now going higher with the cancellation of equivalency and for NPOP, NOP and EU together it costs around INR 0.6 - 0.7 million every year. These additional costs need to be borne by the European Government or the Indian Government. Putting it on the exporters is unfair.

Case Study – JUST ORGANIK (37)

Just Organik, owned by Treta Agro (P) Ltd, an agriculture produce oriented group, primarily working in the Himalayan state – Uttarakhand has been trading organic products to Germany since 2016, had a good business for 3 years in organic and non-organic products and have now stopped trading to Germany. Find out the reasons through one example from their practical experiences.

Speaking specifically about the organic products, it is known that one needs to test the samples from the NABL certified, APEDA accredited laboratories in India. But still the buyer insisted on testing it in Germany again. In India, the lab testing cost him INR 18,000 (Approx. 200 Euro) per sample and in Germany it cost him about INR 90,000 per sample (approx.1000 Euros) for the basic Residue testing. Plus the costs add up if some more parameters need to be tested; For example, addition of Aflatoxin test would cost additional 150 Euros to him. At one time, there were 4 items to be tested, first item lab results said no residues found. But even though the residues were nil, Lab did not write in their report that the sample is organic because it was multi-ingredient product. They wanted all ingredients to be tested separately. Unfortunately, the item was a curry powder which had 9 ingredients. So now they need to be spending about INR 0.9 – 1 million per sample to be tested in Germany, to be qualified as Organic. In such situation no business case exists any more. There were 4 such products, each one of 1 metric ton with a business of 37,000 to 41,000 Euro, but could not send it because of this high testing costs and also because the German lab was unable to write that its organic as it's a multi-ingredient product.

After 2-3 such cases, he stopped sending to Germany as it had lot of cost implications, high risk involvement in terms of one's name and credibility. Small consignments, mixed containers, would never make sense for the organic exporters in India. They also experienced several other incidences even in non-organic, where the medicinal herb was tested in India in multiple labs, all was clear, and then tested in Germany found traces of some molecules that were not known/listed as an issue for EU, the shipment had to be cancelled and with heavy losses.

One of their CB was banned and so they started with another. That also was banned and then later they dropped the idea as it would take additional money to get it tested and go through all the trauma, and they choose to drop from the export to Germany. Instead, would choose to send their organic produce as conventional in the normal market. They still have buyers in Germany waiting for their products. So, if any full proof plan and a good opportunity come forward for them where these challenges are addressed, they are willing to take certification at that point in time. They already have NPOP.

Business still happens with the US market. It is well versed step by step process that they implemented gradually over the years and not suddenly overnight. It has also helped to remove the spurious players out of the system. The risk level there is relatively less.

- Considering the complexity and fraudulent activities, a few private businesses have started to prefer words like regenerative, agro-ecology or family farmers produce to not use the word organic while exporting it to other countries. The word "Organic" is slowly losing its relevance over other names as other names do not have any standards of certification.

Challenges from the Perspective of Independent Experts, outside the Government

Government schemes are generally thinly distributed over larger area. Despite successfully converting farmers to organic, we are facing challenges in connecting them to the market. When farmers are not connected to the right market, they do not get fair price, and hence it's not financially viable for them and they quite often return back to the conventional practices. The ongoing challenge

is that there is lack of confidence among farmers regarding the financial viability of organic farming. While many farmers initially engage in organic practices, the ones who continue in this field long-term are typically larger farmers who can better manage the associated risks, or the ones driven more by passion than economics. Smallholder farmers, who make up the majority, often struggle to sustain organic practices due to the complexities involved. It is common for farmers to transition to organic farming, stay for a few years, and then revert back to conventional methods.

- All the certification systems in India were initially developed for individual farmers. The complexity of the system, and maintenance of documents, was kept to minimal making it easy for an individual farmer to manage. But when the group certification system was added, the biggest hurdle since then is the amount of documentation and the complexity of the documentation making it challenging for small farmers within the group. So, to deal with the challenging complexity they need to hire the external Internal Control Systems (ICS) management groups. NPOP which is considered as a Third-Party Certification, over the years has now become Four Party Certification – Certifier – Farmer – Program – ICS Management. Once this Four Party is added on, they are the controller, they are the operator, it could be anyone NGO, CSO or exporters and over the years they become the owner of the certification programme. Farmers have gradually gone out of the system. With such system, farmer's commitment and devotion to the program goes away and that is the biggest challenge facing today. In today's certification of Third / Four Party, the control of the group is not in the hands of the farmers any longer.

The system is not involving farmer's active participation and active role into the system. Their moral commitment and emotional connect is no longer there. So, the only connect that remains is the financial connect. If farmer is getting the premium prices, they continue to be in the organic farming and if they are not getting the premium price for majority of the crops farmer's commitment are gone. If the farmer stays out of the certification management, then integrity of the system goes away.

- Certifiers work through their operators. Management of Internal Control System (ICS) and maintaining the Integrity of the ICS has become the big challenge over the years. From 2017 a few cases were seen but from 2019 it has become rampant and hence visible to the world. There seems to be a clear-cut understanding on this Integrity issue. There are three types of operators:
 - Those having their own brands, who are buying from the farmers, select a group of ICSs with them, nurture them, provide them with technology, support them and then they also buy back farmers produce. Integrity of ICSs in such systems is generally good. Even in lab testing hardly less than 1% samples get detected with some residues. So, integrity is good in ICS managed by the brands or trusted exporters.
 - The ICSs in the Government run programs in the north-east states of India, where the consumption of pesticides itself is relatively low, the certification system is good and the level of integrity is also good due to the low consumption of chemicals in this region. Problem in these areas is to keep the programs continued with the certification as communities there are spoon-fed and are much dependent on the external support system.
 - Big merchant exporters buy the materials from the ICSs where merchant exporter has no connection with the ICSs. In this situation, there is a complete dis-connect between the buyer and the ICSs. And both are flowing according to the market demand. Some years there will be good market while some years there will be bad market. Integrity of such ICSs is usually worst. Generally, the buyer is not keen in looking into the ICSs. These are the players who have created the mis-trust and bad name for the country.

In case of 1 and 2 types of operators, there is complete chain of custody, so no major integrity issues are usually seen. They ensure that the payment to the farmer is made directly to their account and they maintain the proper documentation straight traceability till the end. But especially where the Merchants come in as operators, it is very difficult.

Challenges from the perspective of Regional Council in PGS India

- The biggest challenge is that PGS India and NPOP, the two certification systems in India are seen to be drastically different. But practically they are not distinctly different. When it comes to the legal frameworks, both follow the same standards of NSOP. Both follow a group approach. Both maintain their own records. So technically, they are not very different. Only difference is one is regulated by Ministry of Commerce and other by Ministry of Agriculture. Accreditation body for NPOP is APEDA and for PGS India it is through National Centre for Organic and Natural Farming (NCONF). For PGS India, there is PGS – Regional Council and for NPOP there is Certification Body. Both are under different Ministries but otherwise there is no much difference between the two systems and it has implications on the use of the Jaiva Krishi logo. The Government needs to invest on building credibility for the Jaiva Krishi Logo.
- **National Equivalency:** With the shift in international regulations from the equivalence model to the compliance model, it is crucial to facilitate a smooth transition from the PGS to the NPOP system. In the prior international equivalency model, if one needs to export to US or EU, it takes 3 years of conversion in NPOP system. Now under the compliance model, one needs additional 3 years of conversion for the US NOP or EU system (total of 6 years). And if one PGS group needs to export, they need additional 1-2 years to convert from PGS to NPOP system. Hence there is a critical need to maintain equivalency within the two certification systems within India and that the Government should not insist on transition from PGS to NPOP, one could also enter US NOP/ EU through PGS India certification as both follow the same NSOP standards. If credibility is found low, one should tighten the regulation and start identifying the Regional Councils accountable as one does for Certification Bodies in NPOP to follow the regulations.

Likewise if PGS groups in Germany and India agree with one another by following the needed standards, regulations and protocols, they should be allowed to export instead of having to spend 8 -9 years in transition from PGS – NPOP – EU/ USDA NOP.

- **International Equivalency** needs to be renewed and APEDA needs to improve its regulations such that the Equivalence system works such that Indian products are again considered as credible.
- **Publish data in public domain:** APEDA has data from 2005 and PGS India has data collected from 2016. Certification data remains at the certification level only. Looking at the data management systems, they are collecting data plot wise, crop wise, season wise, practices wise, yield wise, but that data is never analysed and published for multiple uses. If the same data is used for multiple purposes, then the cost of managing data becomes cheaper. There is a huge potential in this data and integrated data management systems are important. APEDA and NCONF should put out data in public domain highlighting which states are doing better, which crops are doing better, how much yield improvement is happening, among other facts. For now, certification data feels useless, but if these learnings are put out every year, same data would be useful for everybody.

- **Lack of transparency:** Lack of transparency created the current crisis and the equivalency was cancelled. Malpractices and corruption within the institutions – authority level or the private agency level are responsible for the de-listing of the CBs.
- **Fair behaviour towards farmers:** If some GM contamination happens naturally, there should be studies carried out by competent authorities in case of any interventions. For example, when the BT cotton contamination happened, no one came up with any report to understand why such contamination happened. There was also a contamination on the CICR released variety research plot and a commission was immediately appointed, study was done to find out the reasons for contamination instead of punishing the scientist. When contamination was found in farmer's field, then there was no study done to find the reasons, neither the regulators were punished, nor the scientists were punished, nor the aggregators were punished; only the farmer was punished. Fair behaviour towards farmers is critical factor.
- **Complexity of added labels:** University of York is conducting a study on enhancing the relationship between India and Europe, particularly in the realm of organic trade. While there is significant export potential, challenges arise with the Certification Bodies (CBs). The shift from Equivalency to Compliance has added complexity to the situation. Furthermore, the introduction of additional labels such as animal welfare and fair trade has led to a proliferation of 20-30 labels. Clarity is needed in international trade to distinguish mandatory factors from optional ones. Unfortunately, neither the CBs nor other organizations are actively raising awareness on this issue. Many believe that the more labels there are, the more benefits they will receive. However, in reality, more labels often mean more intermediaries for verification.
- **Natural farming adding to the complexity:** The development of standards for natural farming products in India is expected to increase complexity in the near future. Creating a credible market system for Organic products took approximately 15 years, and a similar timeline may be needed for natural products with new standards. The current organic system faces numerous challenges. It is suggested that natural products should not be regulated and allowed to be sold in the conventional market without strict regulations. If regulation is deemed necessary, it should be implemented effectively and thoughtfully.
- **Private standards:** Internationally, the standard practice involves governments establishing a fundamental set of mandatory standards. Private sectors have the flexibility to incorporate voluntary additions alongside these mandatory standards, rather than disregarding them entirely. This approach could have been applied to natural farming as well, starting with core principles like no pesticides or external inputs, and then introducing additional layers through labels. It is essential to maintain consistency by utilizing the same set of standards used for systems like PGS or ICS.
- **Accountability:** In the organic certification system, it is crucial for the Authorities to take the lead in establishing a market. Unfortunately, NCONF has not developed a platform for retailers to purchase certified products based on credible data. Such a platform would assist retailers in identifying trustworthy farmer groups to source products from. As a result, NCONF and APEDA do not feel a sense of accountability in this matter.
- **Conversion requirements:** The requirements for conversion should be tailored to specific situations. For instance, the conversion period for chillies in Guntur may differ significantly from that in Sikkim, where chemical usage is naturally lower. Different standards should be established

for default areas. The concept of Large Area Certification (LAC) is now being considered to facilitate smoother transitions. Conversion timelines vary based on the crop and region, with larger and more input-intensive farms requiring different conversion periods. Farmers should have access to more subsidies during the conversion process, as currently there is lack of enough assistance. To ensure successful organic conversion, all subsidies available for conventional farming should also be extended to organic farming.

Challenges perspective of Certification Bodies

- **Gaps in standards:** There are gaps in the standards, leading to substituted materials being exported as organic. This issue is particularly prevalent in the case of Soyabean, where a significant portion of the organic Soyabean exported originates from the local market. In India, genetically modified organisms (GMOs) are not permitted in Soyabean, only in Cotton. In Europe, there is a high demand for GMO-free Soyabean meal and other Soyabean products, creating opportunities for fraudulent activities in Soyabean exports. Large merchant consortiums dealing with Soyabean Meal and Cotton are often associated with such fraudulent practices.

When it comes to Cotton, the National Programme for Organic Production (NPOP) is effective only up to the raw cotton stage. Once it reaches the fibre stage, certification shifts to the Global Organic Textile Standards (GOTS), yet fraudulent activities persist. Fraudulent practices are commonly observed in high-value products like Sesame, Spices, and others, posing a significant challenge. APEDA has responded by de-listing 5 Certification Bodies (CBs) and is actively enhancing systems, although the scope of improvement remains somewhat limited.

- **Unpredictable residue parameters:** The residue parameters in European organic trade can be unpredictable, with concerns about the discovery of new molecules during testing that could impact trade. Staying informed about the latest updates is crucial to navigating this uncertainty.
- **Laboratory accreditation and further investigation:** Laboratory accreditation involves adherence to ISO standards, NABL certification, and APEDA approval. However, inconsistencies have been observed, such as receiving different results for the same sample tested multiple times at the same laboratory. In some cases, results that were expected to be presented as positive or negative were instead provided in parts per million (ppm) without specified limits. It is important to acknowledge the potential for human error, machine error, and other contributing factors in such situations, prompting a need for further investigation into laboratory testing procedures and standards and their alignment with international standards.
- **Understanding and interpretation of standards:** When transitioning to organic farming, many farmers gradually reduce their use of chemical pesticides and fertilizers. However, some may not realize that a 3-year conversion period means completely abstaining from chemicals for the entire duration. Therefore, a clear understanding and interpretation of standards are essential for maintaining credibility in certification systems.
- **Probable conflict of interest:** Ideally, the responsibilities of Promotion and Accreditation should be assigned to separate governing bodies, such as APEDA and potentially the Quality Council of India (QCI), to ensure independence and credibility. These roles demand distinct skill sets. While the National Programme for Organic Production (NPOP) could have been developed within the QCI, it was established under APEDA. This setup forces APEDA to simultaneously handle both promotion and accreditation tasks. Promotion of exports is a supportive role, whereas

accreditation is more rigorous. Currently, there is one Chairman overseeing both areas of work. Stringent measures on Certification Bodies (CBs) can impact exports, leading to a potential conflict of interest as it affects the organization's vision and goals. The legal authority to use the Organic India logo rests with APEDA, not QCI.

Challenges from the perspective of Independent freelance consultant

- **Good Agriculture Practices (GAP) as the baseline:** Transition phase from conventional to organic is an important phase, mainly for the actual implementation. Many conventional farmers do not understand the Good Agriculture Practices (GAP) and directly jump to organic practices. That is the biggest hurdle. When conventional farmers are doing farming, they have no idea how much good or bad they are practicing on their farm. When they come to organic, they have no idea how much organic they are doing and how much increment every year one needs to achieve while going from good to best Organic is never known to farmers in this transition period. Benchmarking – best level study never happens on farm to farm or case to case level. And hence many are unqualified organic farmers where they feel they are doing organic but they are nowhere. So when someone starts amateur organic farming, they do not understand how to convert this amateur organic farming into professional organic farming because they do not understand the basics of the Good Agricultural Practices (GAP). Brainwashing the entire community on this is frustrating when it comes to the group certification where the entire community needs to follow standards for the group certification.

Similarly, the Certifying Bodies and the Inspection bodies may not know the details of the GAP as the basis of their qualification. Sometimes they might know but do not implement it by hand. When one implements by hand, one understands the difficulties, and can digest the GAP much better.

- **Lack of one voice:** There is existence of three distinct systems: the PGS Organic Council (an NGO consortium initiative since 2006), PGS India via NCONF, and NPOP through APEDA. This multiplicity complicates efforts to present a unified voice of "One India, One Organic" to the outside world.
- **Lack of education:** The foundation of Indian Food Law rests upon Good Agricultural Practices (GAP). Maximum Residue Limits (MRLs) for conventional foods are established based on GAP, label claims, and Pre-Harvest Interval (PHI) of specific active ingredients in plant protection products. Considering these scientific principles, the Regulation on Organic Foods 2017 stipulates that MRLs for organic foods should not exceed 5% of those defined for conventional foods. This underscores the robustness of India's regulatory framework and legislature. However, the challenge lies in promoting awareness and education regarding these standards and regulations to a wider audience.

Recommendations

Improving Transparency and Accountability

Enhancing transparency and accountability within the certification process is vital for ensuring fairness and effectiveness, while also preventing undue burdens or costs on farmers and producers.

This can be achieved by conducting regular audits and inspections and by making the certification process more accessible and open to public scrutiny.

Simplified Documentation

If farmers are not actively involved in certification management, it raises doubts about the integrity of the system. Simplifying paperwork and documentation procedures is essential to make them more farmer-friendly. This effort is aimed at encouraging farmers to engage in training programs and pursue certifications, thereby gaining access to international markets for their produce. By facilitating this process, farmers can secure fair prices for their products and efforts, ultimately reinstating a higher level of integrity into the system.

Certification System – a Bureaucratic Burden or the Key to Gaining Access to a Sustainable and Growing Market?

The Certification System in Germany – some operators see it as a bureaucratic burden that creates more work in the offices and keeps them from working in the field. In fact, organic food is the most strictly monitored food on the market. As a result, consumer trust in the quality of organic products.

However, a risk-based approach is important, to reduce controls to a tolerable level, but also to achieve an appropriate and adequate level of effectivity with the aim of detecting and identifying non-compliances, regardless of whether they have occurred by unintentional or fraudulent behaviour.

The following elements should be part of this risk-based approach.

Surveillance of Minimum Percentages for a Robust Control System

Opportunities for boosting sales are constrained, as higher fees prompt customers to migrate to competitors. Consequently, control bodies strive to conserve resources. As a result, control bodies would minimize additional controls and sampling when minimum percentage thresholds are not defined. Actually, in India, minimum requirements for unannounced inspections, additional controls, and sampling are included in the regulations.

Several Indian certification bodies provide certification services at a significantly reduced cost. However, in order to offset these low fees, these certification bodies sometimes fail to adhere strictly to standards, leading to compromises within the certification system.

As a result, within the scope of surveillance, it is crucial to verify whether the requirements regarding minimum percentages are met by the control bodies.

Risk analysis for Greater Clarity, Standardisation and Efficiency

Standardizing risk assessment, whether through specific rules outlined in requirements or guidelines provided by public institutions within the organic sector, can enhance the effectiveness of the certification system. In such guidelines or specific rules, it can be specified, which risk elements are to be taken into account. In addition, a matrix for evaluating the probability of occurrence and extent of loss, would provide clearer guidance and standardization for control bodies under the National Program for Organic Production (NPOP) and PGS. By specifying the steps involved in the risk assessment process, along with the factors to consider and the methodology for assessing risks, control bodies can conduct more consistent and thorough evaluations.

Additionally, using a matrix to assess the probability of occurrence and extent of loss associated with each risk can help prioritize risks, based on their potential impact on organic integrity. This structured

approach can enhance the effectiveness of risk assessment efforts and enable control bodies to allocate resources more efficiently to address the most significant risks of non-compliances affecting the integrity of organic products.

Planning annual and additional controls of operators early in the year by the control bodies on the basis of risk assessments and a decision on the nature and frequency of controls are regarded as good practice. Consequently, during the yearly office audit of the control body, the competent authority should verify, whether procedures are in place for planning those annual and additional controls and whether these procedures are effectively functioning.

Overall, providing detailed guidance on the risk assessment procedure, including risk elements and assessment criteria, can contribute to greater transparency, consistency, and effectiveness in managing risks within the organic production system under the NPOP and PGS. Moreover, such common risk assessment procedures foster fair competition between control bodies as well as between operators within the certification system.

Traceability and Mass balance checks

Mass balance and traceability checks serve as a vital tool in the fight against food fraud by providing a systematic approach to detecting and preventing unauthorized utilization of non-organic products or identifying potential sources of contamination with non-authorized substances as shown in the chapter “Mass Balance and Traceability Checks”. As a result, these checks help safeguarding consumer trust and ensuring the integrity of the food supply chain. Within controls they should be mandatory.

Exchange of Information

In cases of suspected or established non-compliances, fraud or contamination of organic products with non-authorized substances, institutions are supposed to cooperate and exchange the relevant information to identify the source and the cause as soon as possible.

A deadline should be defined within which the current status of the investigation should be reported at the latest.

Surveillance of Control Bodies

Control Bodies should be obliged to notify the authority of inspection dates in due time, so that witness-audit can be carried out. Additionally, review audits of authorities after the control of a control body can be beneficial in verifying, whether the inspection was conducted appropriately by the inspector of the control body.

In India, a biased treatment exists between private and government certification bodies. To date, numerous private certification bodies have faced de-accreditation or sanctions. Conversely, there hasn't been a single instance of a government certification body being de-accredited or sanctioned. Consequently, Grower Group operators are increasingly turning to government-run certification bodies for their certification needs. To verify, how government certification bodies conduct controls and certification, they should be subject to internal audits.

National Equivalency

With the shift in international regulations from the equivalence model to the compliance model, it is crucial to facilitate a smooth transition from the PGS India to the NPOP system. There is a critical need to maintain equivalency within the two certification systems within India such that the Government should not insist on transition from PGS India to NPOP, and one could also enter US

NOP/ EU international export market through PGS India certification as both follow the same NSOP standards.

Alignment of Laboratories

The laboratories in Germany and India operate independently without alignment. To address this, a process akin to the accreditation of certifying bodies could be established, where German authorities, similar to India's NABL (National Accreditation Board for Testing and Calibration Laboratories), accredit certain Indian laboratories. This process would ensure alignment in equipment standards and other crucial aspects, as defined by German standards. Despite challenges such as equipment and skillset disparities, a willingness to collaborate can pave the way for solutions.

Reciprocity between testing labs is essential, ensuring that Indian labs are regarded on par with those in Germany. The German government should be open to accepting test results from Indian labs, that are accredited by NABL. Likewise, if the Indian government approves test results from German labs, regardless of NABL accreditation, it would foster trust and collaboration between the two countries' testing systems.

Costs

The rising costs of laboratory testing are impacting market competitiveness. For instance, the demand for Indian pepper is diminishing in favour of Sri Lankan pepper due to lower testing expenses. To address this, the Government of India could subsidize the additional testing requirements. Moreover, improving the accreditation process and increasing the availability of certification bodies can reduce both the duration and costs associated with testing.

Training

Enhance competency in farming through targeted training programs that focus on both qualifications and practical experience, emphasizing the conversion of farming efforts into financial returns to sustain the profession.

Suspicion, Justice and Fraud

Direct Bank Transfers (DBTs)

Establish comprehensive traceability measures ensuring that farmers are recorded, materials are purchased, and payments are officially deposited into their bank accounts. By implementing this, the integrity of India's organic certification system can be restored to its pre-2016-17 level. Therefore, emphasis should be placed on traceability and ensuring timely payment to farmers' bank accounts. Simplification, thorough traceability, proper monitoring of materials purchased from farmers, and ensuring payments are made accurately are critical aspects to be addressed.

Grower Group Certification and the Significance of DBT

Under the Grower Group certification scheme, which allows 25 to 500 farmers to form a legal entity such as an NGO, FPO, FPC, or Pvt Ltd in India, financially and technically robust groups can apply for certification. Typically, such farmer groups require a company to cover the costs of their certification through their internal control system (ICS). This company, acting as the operator, enters into an agreement with the grower group, allowing them to exclusively sell their produce as organic to the

contracted company and prohibiting sales to others. While they retain the option to sell elsewhere, it cannot be marketed as organic.

There were traders who claimed to have around 70 to 80 grower groups, each comprising 500 farmers on paper. However, in reality, the farmers had little to no understanding of organic practices. Upon realizing this discrepancy, APEDA decided to revoke the accreditation of certification bodies (CBs) such as APOF, BioCert, Gomata, EcoCert, and Vedic.

It should be mandatory for operators to adhere to the Direct Bank Transfer (DBT) system, ensuring that they transfer funds directly to farmers' accounts rather than providing cash payments. This measure serves as a significant safeguard, as it prevents the possibility of paying farmers in cash while purchasing substitute materials from the local market. In cases where such misconduct occurs, it can be easily identified and rectified. Currently, invoices are issued in the name of the farmer (also called as rotational invoices), but payments are often made in cash or left unpaid to genuine farmers, with materials being sourced from the conventional market for organic export.

NPOP certification focuses on system certification rather than product certification, creating a gap in mandating DBT for operators to farmers.

Think like a Criminal!

Fraud sometimes remains undetected for a long time. The reason is often to be found in a weak control system. However, sometimes the fraudulent activities are so sophisticated that it is almost impossible to detect them. Collaborating with a criminal investigation department and engaging forensic scientists can prove beneficial for both, current investigations and future prevention efforts.

In case of the European Union, there is the Agency for Criminal Justice Cooperation, called EUROJUST⁴⁷. It is a unique hub based in The Hague (NL), where national judicial authorities work closely together to fight serious organised cross border crime. Eurojust helps to coordinate the work of national authorities in Member States and Third Countries in investigating and prosecuting transnational crime.

Each participating EU Member State seconds a National Member to Eurojust (38).

Jurisdiction for Justice!

In cases, a control body decides, that a product should not be placed on the market as organic, for example because a product is regarded as contaminated with unauthorized substances on the basis of an analysis, the company concerned should have the opportunity to take legal action. This means, that an operator should be able to lodge an objection.

In the event, that the control body rejects the objection, the company should be able to file a complaint with an administrative court. Consequently, administrative courts tasked with this function should be established.

Private Labelling

Awareness regarding organic production is significantly higher in Germany compared to India. In Germany, the government has implemented various strategies to enhance this awareness, which could potentially be adopted by the Indian government to stimulate the growth of the organic market. In India, the use of private labels alongside organic labelling is prohibited, whereas in Germany, it is permitted. Introducing private labels in India could potentially boost demand for

⁴⁷ www.eurojust.europa.eu

organic products among certain consumer segments. By employing effective marketing strategies, private labels enable retailers or brands to differentiate their products from other organic offerings. However, it may also lead to confusion among other consumer groups due to the presence of multiple labels. Conducting a study on the acceptance of private labels in India could provide clarity and further drive the growth of the organic market.

Diversify Products

Currently the quantum of export from India has drastically gone down by 40% compared to 2018-19. In the international markets, 40% of organic demand is for fresh fruits and vegetables, 20% of organic demand is for the Dairy, other 15% is for meat and fish products, 10 -12 % is for the processed foods, and currently India is not there in any of these organic exports. India is competing only in the 15% organic demand for all other commodities like spices, cereals etc at the present. So, even if India improves the integrity, if one does not diversify into products like fresh fruits and vegetables, one cannot increase the quantum of Indian organic exports. If India wants to increase its export footprint, one needs to focus on fresh fruits and vegetables, dairy – desi Ghee or Butter and processed products.

Potential GMO Free Market and Demand

In the EU, there are two major quality production sectors that explicitly work without GMOs: the organic sector - where GMOs are banned by law - and the Non-GMO sector, where food producers exclude GMOs throughout the whole value chain on a voluntary basis. In the last 10-15 years, Non-GMO production in EU has developed into a strong and successful business segment with a rapidly growing range of products labelled as Non-GMO. In 2022, the Non-GMO market recorded sales of 16 billion euros in Germany and 2.5 billion euros in Austria. The estimation for other EU markets are a further about 2 billion euros, including in France where there is a popular “sans OGM” label²². As seen in Europe, there is a huge potential for India to tap this non – GMO or GMO free sector that is growing rapidly. If India decides to have a complete ban on GM food crops, the costs and efforts to monitor non-compliances will be drastically reduced, bringing back the lost image of Indian organic products to the outside world.

New Technologies

Improving Traceability

As part of the European Union's action plan for the development of the organic sector, an assessment is being conducted to determine how blockchain and other digital technologies could enhance the traceability of organic products (38).

How great is the potential in India to develop such a technology like blockchain or other digital technologies to improve traceability of organic products and how is the potential to export such a technology from India to other countries?

“The traceability of organic products stands to gain significantly from blockchain and other digital technologies. These technologies offer immutable and transparent records of each stage of production, processing, and distribution, ensuring the authenticity and integrity of organic certification. Blockchain, in particular, allows for a decentralized and secure database where information cannot be altered retroactively, providing consumers and regulators with confidence in the organic supply chain. Additionally, digital technologies such as IoT sensors and RFID tags can enhance traceability by providing real-time monitoring of environmental conditions and product

movements. Overall, leveraging blockchain and digital technologies can greatly improve the traceability of organic products, thereby enhancing trust among consumers and stakeholders in the organic industry.

The potential for India to develop digital solutions to enhance the traceability of organic products is significant. With its thriving tech industry, skilled workforce, and growing interest in sustainable agriculture, India is well-positioned to innovate in this area. By leveraging its expertise in software development and embracing initiatives aimed at promoting organic farming and sustainability, India can contribute significantly to the advancement of traceability technologies for organic products. Moreover, given the country's vast agricultural sector and diverse ecosystems, implementing robust traceability solutions has the potential to boost consumer confidence, facilitate international trade, and promote environmental sustainability in the Indian organic industry.

Finally, India has the potential to emerge as a key exporter of traceability technologies for organic products, leveraging its technological prowess, domain expertise, and collaborative networks to address global demand for reliable and sustainable agricultural practices.”

Early Warning Systems

One strategy of the action plan of the European Union for the development of the organic sector regarding measures preventing food fraud and strengthening consumer trust is the development of early warning systems on the basis of artificial intelligence for data mining in EU and Member State databases (38).

In which ways the use of artificial intelligence can support India to reduce non-compliances and fraud regarding organic production?

This question, but also the question on how blockchain or other digital technologies can support regarding traceability were entered into the ChatGPT input mask to complete this report. The *answer of ChatGPT* regarding this question is in the last chapter, the *answer of ChatGPT* regarding the question at the beginning of this chapter is the following:

“The utilization of artificial intelligence (AI) can significantly aid India in reducing non-compliances and fraud related to organic production in several ways:

1. **Data Analysis:** *AI algorithms can analyze vast amounts of data from various sources such as satellite imagery, sensor data, and supply chain records to detect anomalies and inconsistencies that may indicate fraud or non-compliance.*
2. **Predictive Analytics:** *By analyzing historical data and patterns, AI can predict potential areas or instances of non-compliance or fraud, allowing authorities to take proactive measures to prevent them.*
3. **Supply Chain Monitoring:** *AI-powered systems can monitor the entire organic production supply chain, from farm to market, to ensure that organic standards are maintained at every stage. This includes tracking the movement of organic products, verifying certifications, and detecting any unauthorized changes or substitutions.*
4. **Image Recognition:** *AI-based image recognition technology can be used to verify the authenticity of organic certifications and labels on products. This helps in identifying counterfeit products or instances where non-organic products are being misrepresented as organic.*
5. **Natural Language Processing (NLP):** *NLP algorithms can analyze text data from documents, emails, and online sources to identify patterns or language indicating fraudulent activities, such as false claims or misleading information about organic products.*

6. **Blockchain Technology:** Integrating AI with blockchain technology can create a transparent and immutable record of transactions and certifications throughout the organic supply chain. This ensures greater trust and accountability, as every transaction and certification can be verified and traced back to its source.
7. **Risk Assessment:** AI can assist in conducting risk assessments by analyzing various factors such as historical data, market trends, and regulatory compliance records. This helps authorities prioritize inspections and interventions in areas with a higher likelihood of non-compliance or fraud.
8. **Real-time Monitoring:** AI-powered systems can provide real-time monitoring of organic production facilities and farms, detecting deviations from organic standards as they occur. This allows for immediate intervention to rectify issues and maintain the integrity of organic certification.

By leveraging AI technologies in these ways, India can strengthen its oversight of organic production, enhance consumer confidence in organic products, and mitigate the risks associated with non-compliance and fraud in the organic sector.”

Drones

Use of drones by the Inspector in the field would reduce the time taken by them in physical inspection and the same time reduces the costs of certification.

Alternative Initiatives - Organic Passport Initiative

The development of the Organic Passport Abhiyan is currently underway on a pilot scale, spearheaded by Abhilash Ghore, Director of Shree Shrampratishtan, Agriculture Lifestyle Development Foundation. In response to instances of food fraud tarnishing the reputation of "Organic" products, this initiative aims to restore consumer confidence. It does so by introducing an additional guarantee provided by the Police and FSSAI, ensuring the authenticity of organic products. By enhancing complaint resolution mechanisms and fostering trust, the Organic Passport Abhiyan encourages greater consumer participation. The socio-economic progress facilitated by this initiative holds the potential to elevate the Gross Happiness Index. The comprehensive dashboard of the passport offers stakeholders a wealth of information, enabling informed decision-making and effective progress monitoring. Organic passport holders gain exclusive access to various training sessions, field visits, classroom trainings, events, and markets, thereby enriching their knowledge and skills for improved farming practices. This initiative is currently in development and has begun implementation in select districts of Maharashtra. It is set to scale up into a nationwide project across India in the near future.

Adopting a Long-Term Partnership Approach

For successful export endeavors, it's imperative to establish long-term contracts, fostering strategic planning over an extended period. While many toxins or heavy metal residues can be mitigated at the processing and storage stages, addressing these issues at the farming level is equally crucial. It's essential to cultivate partnerships grounded in a long-term vision rather than a transactional mindset. A platform should be created where suppliers and buyers engage in advance planning, understanding each other's requirements, and ensuring comprehensive oversight from the farm level to the end product. This collaborative approach will significantly alleviate testing-related challenges.

Publish Data in Public Domain

APEDA has data from 2005 and PGS India has data collected from 2016. Certification data remains at the certification level only. Looking at the data management systems, they are collecting data plot wise, crop wise, season wise, practices wise, yield wise, but that data is never analysed and published for multiple uses. If the same data is used for multiple purposes, then the cost of managing data will become cheaper.

Natural Farming

The current organic system in India faces numerous challenges. It is suggested that natural products should not be regulated and allowed to be sold in the conventional domestic market without strict regulations. If regulation is deemed necessary, it should be implemented effectively and thoughtfully.

[Latest Updates from APEDA \(39\)](#)

In a significant stride towards bolstering India's organic export sector, the Commerce & Industry Ministry announced in Feb 2024, that the APEDA has established a dedicated organic promotion division that will serve as a central point for coordinating efforts to enhance the country's organic export potential. Moreover, to increase the accessibility of organic products in international markets, the National Programme for Organic Production (NPOP) is undergoing substantial updates. According to the ministry, these forthcoming revisions in NPOP guidelines aim to align with prominent global regulations and standards, such as the requirements of the EU for organic production and labelling.

This strategic realignment is designed with a foresight into ongoing and prospective Mutual Recognition Agreements, with a pivotal aspect being the modernization of NPOP's IT infrastructure. The revamped IT system is expected to provide a more robust oversight mechanism, particularly focusing on Certification Bodies and their certified operators. It envisions provisions for geo-tagging of farms and geo-location of inspection visits.

APEDA's vision extends to replicating successful initiatives in Uttarakhand and plans for Sikkim. By targeting regions with significant organic farming potential, APEDA aims to establish a network of thriving organic export hubs across India. APEDA is actively working to enhance Uttarakhand's organic sector through a comprehensive strategy. This plan includes improving farming practices, streamlining certification procedures, and identifying prime export products. The ultimate goal is to elevate Uttarakhand's profile as a major player in the global organic market.

Additionally, building on Sikkim's pioneering status as India's first fully organic state, APEDA is formulating a strategic roadmap to diversify exports and strengthen sustainable practices. Leveraging Sikkim's unique strengths in the organic realm, APEDA aims to elevate its prominence on the international stage.

As attempts are being made to have an official interview with APEDA, sources tell us that APEDA is planning to involve Yes Bank in these visionary changes for boosting the organic exports and improving farmer's livelihood. In 2016, they had involved Yes Bank along with AIOI and Ingenus Strategy to produce a white paper on Indian Organic Sector: Vision 2025 (40) and as they may have seen the expected results, they plan to venture forward with support.

Conclusion

India is a signatory to the Kyoto Protocol (KP) in 2002 and the United Nations Framework Convention on Climate Change (UNFCCC) and the Paris Agreement (PA) in 2016 (41). For promotion of Organic Farming within India, Government of India established National Centre for Organic Farming (NCOF) in 2004 and is dedicated to addressing climate change through numerous programs outlined in the National Action Plan on Climate Change (NAPCC) since 2008. This comprehensive framework encompasses eight missions focused on solar energy, energy efficiency, water, agriculture, the Himalayan ecosystem, sustainable habitat, green initiatives, and strategic climate change knowledge (42).

The National Mission for Sustainable Agriculture (NMSA), one of the eight missions under NAPCC, formed in 2014-15, implements various programs aimed at benefiting farmers. These interventions include initiatives such as the Paramparagat Krishi Vikas Yojana (PKVY), Mission Organic Value Chain Development for North Eastern Region (MOVCDNER) among many others like the Soil Health Card (SHC), Rainfed Area Development (RAD), National Bamboo Mission (NBM), and Sub-mission on Agro Forestry (SMAF) (43).

Since March 2022, the NCOF has been renamed as National Centre for Organic and Natural Farming (NCONF) to promote both organic and natural farming. Though government's intention to promote natural farming along with organic farming is in alignment with NMSA, there is un-necessary complexity added on ground for farmers.

Organic farming has standards while for Natural Farming they are planning for standards. The development of standards for natural farming products in India is expected to further increase complexity in the near future. Considering the current challenges in organic system it is suggested that natural products should not be regulated and allowed to be sold in the conventional market without strict regulations. If regulation is deemed necessary, it should be implemented gradually, effectively and thoughtfully.

Government of India is promoting both these non-chemical systems of agriculture. Natural farming, through National Mission on Natural Farming (NMNF) and organic farming through Paramparagat Krishi Vikas Yojna (PKVY) and Mission Organic Value Chain Development for North Eastern Region (MOVCDNER). In 2023-24, the National Mission on Natural Farming (NMNF) has been formulated for upscaling the Bhartiya Prakritik Krishi Paddhati (BPKP) to promote natural farming across the country giving a sense of focus more towards Natural Farming compared to Organic Farming. GMOs are banned by law in the Organic Farming systems while inclusion of GM crops in Natural Farming is unclear and a grey area to explore in the near future.

The study revealed that consumer awareness regarding organic production is higher in Germany than in India. Informing consumers about organic farming, from agricultural production through processing and distribution to consumption, at food markets or trade fairs where they can also taste organic food, can positively impact the development of the organic products market.

Too many labels in the market bear the risk of confusing consumers. Nevertheless, when coupled with effective marketing strategies, it can expand the reach of organic food to more consumers. Utilizing a limited number of private labels, alongside those provided by the state, can streamline the process. Organizations permitting the use of their trademark, subject to compliance with their standards, should undergo accreditation.

Considering the risk of contamination, transparency and accountability as one of the major recommendations, maybe its high time that there is a holistic agriculture policy and a clear vision to mainstream organic farming to make India GMO free such that the conventional agriculture could be

regulated more to boost its organic export business and net income to farmers exponentially. More interventions and support are required towards building capacities of farmers on processing, value addition, branding, packaging, labelling creating awareness and trainings on certification standards along with the farming practices to stand upright for national and international markets. All committees, action plans and pragmatic schemes call for more alignment to the international treaties and signatory commitments to achieve a common vision that build synergies and make India unique development economy with highest Integrity.

The organic market is a growing market, because consumers trust the quality of these products. One major problem, regardless whether it occurred unintentional or it was caused by fraudulent activity could have severe influence on the development of the organic market, as several examples have shown this in the World.

Providing free or subsidized training, along with guidelines for farmers embarking on organic farming, as well as establishing organic demonstration farms or parks, can significantly mitigate non-compliance issues. These initiatives have the potential to safeguard the development of the organic market and prevent harm. To foster the continued growth of the expanding market, an analysis should be conducted to assess whether providing additional subsidies to farmers during the conversion period would yield positive effects on this development. This is crucial as farmers entering the organic market are subject to meeting all requirements from the outset of the conversion period, despite not yet benefiting from the organic market.

To ensure a fair competition in the organic market and to maintain confidence of the consumer in organic products, a common risk assessment procedure to be applied by every control body on the basis of the same elements can also foster transparency, consistency, and effectiveness.

Mass balance and traceability checks are fundamental elements of controls. Therefore, training staff working in control bodies or authorities on how to conduct these checks should be an integral part of their training program.

In instances of non-compliance, the exchange of information among institutions within the certification system is considered crucial for an effective handling of suspected or established non-compliances and as a result, for upholding the trust of participants in the market of organic products.

Recurring witness or review audits subject to the controls of the control bodies should be conducted to assess the efficacy of controls and uncover weak points.

Indian and German laboratories can collaborate to explore measures aimed at enhancing the acceptance of analyses conducted in India.

New technical solutions have the potential to enhance traceability, to provide support to institutions involved in the certification system and to reduces costs.

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