A term paper on

Organic Certification, its process, National and International Trends

Submitted to submitted by

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Introduction

Nepal is an agricultural country and about 60% of people engaged in agriculture to sustain their livelihood and contributes about 33% of the GDP. The practices of producing organic vegetables, fruit, milk, meat, fishes and their product also exist for more than ten years in some places of Nepal like Gamcha of Bhaktapur and Fulbari of Chitwan districts. Organic agriculture is holistic production management system which promotes and enhance agro-ecological health, including biodiversity, biological cycle and soil biological activities. Harwood outlines organic agriculture is a farming ways without the use of chemicals as it is to be done in 1940s. There have not any policies to restore this indigenous knowledge and agricultural practices so that it is not ignored, but also severely threatened to recover in many places. Organic agriculture is a viable solution to prevent global hunger by providing comparatively higher yield from low input agriculture in food deficit regions. Use of organic fertilizers proved to be given an excellent response as compared to inorganic fertilizer.

Current practices of organic agriculture are a modification and continuation of indigenous practices. Organic agriculture in Nepal was officially introduced by some professional, NGOs, and individual committed to the promotion of organic agriculture in small pocket areas.

Organic certification is a process of branding or labeling of farm or farm products declaring them to meet the standard guidelines set so as to be called organic. It is a process ensuring that the producers and processors strictly follow the requirements and standards set. After the certification of farm or products, one is issued with a certificate which is a written guarantee provided by independent third agency stating the processes of production and products satisfy the specific standards. Farms or products are then furnished with label and the branding of the products can be done.

Why certification is necessary?

Certification provides affirmation to customers and lifts confidence of farmers in the marketing process. Products in farm are grown following organic production system and are tracked from field to market ensuring they are within the organic standard maintaining economic, social and environmental integrity. On basis of this tracking, products are then further labeled as "100% Organic", "Organic" (95% - 100%) or "Made with organic ingredients" (at least 70% organic

ingredients). This helps customers to easily recognize and differentiate organic foods from other. Certification helps both farmers and customers to build trust and deal easily with belief during the trade. After provision of labels and brand, farmers can comparatively get higher price for their products.

According to the report of International Federation of Organic Movement, 9789 ha of organic land is managed by 1470 producers of Nepal. And there were only 26 farms in Nepal covering 45 hectares of land registered as organic farms in 2005. There are many nationally and internationally accredited organizations or third party agencies working to issue organic certification in Nepal. Organic Certification Nepal (OCN) is the only one national certification organization in Nepal whereas there are many international organizations like NASAA (Australia), ECOCERT (France), One Cert Asia (USA), IMO (Switzerland), Control Union (Netherlands), Cert All, ICEA (Italy), ECOCERT (Aryal & Tripathee, 2018).

Importance of organic certification

- ✓ Organic certification helps in building trust between consumers and organic farmers
- ✓ The certification marks organic is the only means to differentiate between certified organic and conventional food
- ✓ Labels and certification marks help a consumer recognize trustworthy organic products easily
- ✓ Organic certification and logo are important marketing tools and
- ✓ Organic certification help in getting comparatively better price

Some general steps followed during the certification process are shown below:

First of all, applicant must choose the certifying agency before applying for organic certification. Once the certifying agency is decided, applicant should maintain the record of entire production, list of products grown, raised and processed, processing and handling process and checklists along with social and environmental integrity operation for last 3 years, organic farming plan, inputs used like fertilizers, pesticides, invoices, purchase orders, ledgers, tax returns and breeding records.

- Proposal Submission: Once these documents are prepared farmers, farmers group, cooperatives and processors should contact and apply to certifying agency along with the proposal.
- 2. Application Form Submission: After evaluating the proposal, certifying agency replies applicant within 60 days and asks for reply or submission of certification form. Applicant must completely fill the certification form with detailed information and submit to certifying body within given period of time.
- 3. Contract of Agreement: If the submitted information is complete, a contract is done between applicant and certifying body on issuing organic inspector.
- 4. Inspection: Certifying body then assigns a trained organic inspector, who inspects the organic farm and/or facility and the entire processes. Then the inspector reviews fields, equipment, buildings, neighboring land, seed sources, harvesting methods, records of management practices, storage, composting, transportation and sales practice. If any additional information is required inspector suggests to submit them. And the completion of inspection may take from a day to 7 days depending on the complexity of operation.
- 5. Inspection report: After completion of inspection, the inspector and applicant sign an affidavit before submitting it to the certifier. The inspector submits the inspection report along with laboratory report and checklists of entire processes to certifying body.
- 6. Decision of evaluating committee: The report and checklists are reviewed by the evaluation committee of certifying body and confirms into a decision. There are three outcomes of this review process.
- Approved: If the review is accepted, the certifying body issues certificate and logo to
 those organic firms recommended by evaluation committee. Applicant can now begin
 marketing products as organic and may use the organic seal.
- Flagged: If there are minor discrepancies and issues they must be further addressed or provided with additional information before certification.
- Denied: If the applicant doesn't meet the standards and guidelines of organic farming which can't be addressed in short term, then the application is denied.

In this way, the certification procedure is completed. Here above, the general guidelines are noted out but the specific procedure may differ according to standard of certification as

certifying bodies follow their own method to ensure and verify the conditions mentioned in the standard.

Purpose

Organic certification addresses a growing worldwide demand for organic food. It is intended to assure quality and prevent fraud, and to promote commerce. While such certification was not necessary in the early days of the organic movement, when small farmers would sell their produce directly at farmers' markets, as organics have grown in popularity, more and more consumers are purchasing organic food through traditional channels, such as supermarkets. As such, consumers must rely on third-party regulatory certification.

For organic producers, certification identifies suppliers of products approved for use in certified operations. For consumers, "certified organic" serves as a product assurance, similar to "low fat", "100% whole wheat", or "no artificial preservatives".

Certification is essentially aimed at regulating and facilitating the sale of organic products to consumers. Individual certification bodies have their own service marks, which can act as branding to consumers—a certifier may promote the high consumer recognition value of its logo as a marketing advantage to producers.

Methods

Third party

In third party certification, the farm or the processing of the agriculture produce is certified in accordance with national or international organic standards by an accredited organic certification agency. To certify a farm, the farmer is typically required to engage in a number of new activities, in addition to normal farming operations:

- Study the organic standards, which cover in specific detail what is and is not allowed for every aspect of farming, including storage, transport and sale.
- Compliance farm facilities and production methods must comply with the standards, which may involve modifying facilities, sourcing and changing suppliers, etc.
- Documentation extensive paperwork is required, detailing farm history and current set-up, and usually including results of soil and water tests.

- Planning a written annual production plan must be submitted, detailing everything from seed to sale: seed sources, field and crop locations, fertilization and pest control activities, harvest methods, storage locations, etc.
- Inspection annual on-farm inspections are required, with a physical tour, examination of records, and an oral interview.
- Fee an annual inspection/certification fee (currently starting at \$400–\$2,000/year, in the US and Canada, depending on the agency and the size of the operation). There are financial assistance programs for qualifying certified operations.^[3]
- Record-keeping written, day-to-day farming and marketing records, covering all activities, must be available for inspection at any time.

In addition, short-notice or surprise inspections can be made, and specific tests (e.g. soil, water, plant tissue) may be requested.

For first-time farm certification, the soil must meet basic requirements of being free from use of prohibited substances (synthetic chemicals, etc.) for a number of years. A conventional farm must adhere to organic standards for this period, often two to three years. This is known as being in transition. Transitional crops are not considered fully organic.

Certification for operations other than farms follows a similar process. The focus is on the quality of ingredients and other inputs, and processing and handling conditions. A transport company would be required to detail the use and maintenance of its vehicles, storage facilities, containers, and so forth. A restaurant would have its premises inspected and its suppliers verified as certified organic.

Participatory

Participatory guarantee system represent an alternative to third party certification, especially adapted to local markets and short supply chains. They can also complement third party certification with a private label that brings additional guarantees and transparency. PGS enable the direct participation of producers, consumers and other stakeholders in:

- the choice and definition of the standards
- the development and implementation of certification procedures
- the certification decisions

Participatory Guarantee Systems are also referred to as "participatory certification"

Alternative certification option

The word organic is central to the certification (and organic food marketing) process, and this is also questioned by some. Where organic laws exist, producers cannot use the term legally without certification. To bypass this legal requirement for certification, various alternative certification approaches, using currently undefined terms like "authentic" and "natural", are emerging. In the US, motivated by the cost and legal requirements of certification (as of Oct. 2002), the private farmer-to-farmer association, Certified Naturally Grown, offers a "non-profit alternative eco-labeling program for small farms that grow using USDA Organic methods but are not a part of the USDA Certified Organic program."

In the UK, the interests of smaller-scale growers who use "natural" growing methods are represented by the Wholesome Food Association, which issues a symbol based largely on trust and peer-to-peer inspection.

Organic certification by USDA

The National Organic Program Final Rule (NOP) was developed by the USDA to implement the Organic Foods Production Act of 1990 (OFPA). The NOP is based on recommendations of the National Organic Standards Board (NOSB), which was appointed by the Secretary of Agriculture to provide advice to implement OFPA and to review substances allowed in organic production and handling.

The USDA issued the first proposed rule in December, 1997. That proposed set of standards would have allowed genetic engineering, irradiation, sewage sludge, antibiotics, re-feeding of animal by-products, and other practices long prohibited in organic agriculture. That proposal received 275,603 comments, and was withdrawn. The second proposed rule was issued in March, 2000. It was much more consistent with existing organic standards than the first proposed rule. It received about 40,000 comments, and served as the basis for the "Final Rule", issued in December 2000. The Final Rule contains an extensive list of definitions, organic production and processing standards, and the "National List" of allowed synthetic and prohibited natural substances. It also contains labeling, certification, accreditation, enforcement, and testing requirements. The regulation went into effect on October 21, 2002.

In simplified terms, the National Organic Program standards require:

For crop farms

3 years (36 months prior to harvest) with no application of prohibited materials (no synthetic fertilizers, pesticides, or GMOs) prior to certification;
distinct, defined boundaries for the operation;
proactive steps to prevent contamination from adjoining land uses;
implementation of an Organic System Plan, with proactive fertility management systems; conservation measures; and environmentally sound manure, weed, disease, and pest management practices;
monitoring of the operation's management practices to assure compliance;
use of natural inputs and/or approved synthetic substances on the National List, provided that proactive management practices are implemented prior to use of approved inputs;
no use of prohibited substances;
no use of genetically engineered organisms (GMOs), defined in the rule as "excluded methods";
no use of sewage sludge or irradiation;
use of organic seeds, when commercially available (must not use seeds treated with prohibited synthetic materials, such as fungicides);
use of organic seedlings for annual crops;
restrictions on the use of raw manure and compost;
must maintain or improve the physical, chemical, and biological condition of the soil, minimize soil erosion, and implement soil building crop rotations;
fertility management must not contaminate crops, soil, or water with plant nutrients, pathogens, heavy metals, or prohibited substances;
maintenance of buffer zones, depending on risk of contamination;

	prevent commingling on split operations (the entire farm does not have to be converted to
	organic production, provided that sufficient measures are in place to segregate organic from non-organic crops and production inputs);
	no field burning to dispose of crop residues (may only burn to suppress disease or
	stimulate seed germination – flame weeding is allowed); and
	no residues of prohibited substances exceeding 5% of the EPA tolerance (certifier may
	require residue analysis if there is reason to believe that a crop has come in contact with
	prohibited substances or was produced using GMOs).
For liv	vestock operations
	implementation of an Organic Livestock Plan;
	monitoring of management practices to assure compliance;
	organic management from last third of gestation for slaughter stock or 2nd day after
	hatching for poultry;
	one year of organic management for dairy cows prior to the production of organic milk,
	with an allowance to use farm-raised, third-year transitional feed when first converting a
	dairy farm to organic production;
	organic management of dairy animals from the last third of gestation, once an operation
	has converted to organic;
	mandatory outdoor access for all species when weather is suitable;
	mandatory access to pasture for ruminants during the grazing season, which must be at
	least 120 days/year;
	for ruminants, at least 30% dry matter intake from grazing during the grazing season;
	for ruminants, development of a pasture plan describing type of pasture, fencing and
	watering system, number of animals, length of grazing season, and steps taken to prevent
	erosion and protect water quality;
	100% organic feed and approved feed supplements - agricultural ingredients used in feed
	supplements must be organic;

DL-methionine allowed through October 21, 2010;					
no antibiotics, growth hormones, or GMOs;					
operator must implement preventative health care practices;					
vaccines, biologics, and excipients in livestock medications are allowed;					
parasiticides prohibited for slaughter stock and tightly regulated for dairy and breeder stock;					
physical alterations (castration, beak trimming, etc.) are allowed, if done to promote animal's welfare and stress is minimized;					
animals must not be rotated between organic and non-organic production;					
operator must not withhold treatment in order to preserve an animal's organic status, but any animal treated with a prohibited substance must not be used or sold as organic; and					
Manure must be managed to prevent contamination of crops, water, and soil, and optimize the recycling of nutrients.					
For processing operations					
implementation of an Organic Handling Plan;					
may use mechanical or biological processing methods;					
no commingling or contamination of organic products during processing or storage;					
no use of GMOs or irradiation;					
must use proactive sanitation and facility pest management practices to prevent pest infestations;					
must take steps to protect organic products and packaging from contamination, if pesticides are used in the processing facility;					
must keep records of all pesticide applications;					
must not use packaging materials that contain fungicides, preservatives, or fumigants;					
must use organic minor agricultural ingredients in products labeled "organic", unless such ingredients appear on section 205.606 of the National List and are not commercially available from organic sources;					

must use approved label claims for "100% organic" (100% organic ingredients, including
processing aids), "organic" (at least 95% organic ingredients), "made with organic
ingredients" (at least 70% organic ingredients) and proper use of the word "organic" in
ingredient list (less than 70% organic ingredients); and

☐ must identify the name of the certifier of the final handling operation on the product's information panel.

All operations producing and/or selling organic products must keep records to verify compliance withtheregulation.

Such records must: 1) be adapted to the particular operation; 2) fully disclose all activities and transactions of the certified operation in sufficient detail as to be readily understood and audited; 3) be maintained for at least 5 years beyond their creation; and 4) be sufficient to demonstrate compliance with the regulation. The operator must make the records available for inspection.

Organic System Plan forms are typically provided by certifying agents as part of the application process. The plans must be updated annually, and operators are required to notify their certifying agents of all changes to the operation which might affect the operation's certification status. Organic operations must follow their Organic System Plans, and they must be inspected at least annually.

All producers and handlers who sell over \$5000/year in organic products must be certified. Producers and handlers who sell under \$5,000/year do not have to be certified, but they still have to follow the NOP. Non-certified organic producers can sell their products directly to customers or to retail stores, but their products cannot be used as organic ingredients or feed by other operations, and they cannot use the "USDA Organic" seal.

Though the NOP requirements are similar to previous organic standards, there are some significant differences, and there are areas of continued controversy, confusion, and clarification. Despite the level of detail in the NOP, some interpretation is required for local variations and new conditions. It is always a good idea to check with certification agencies to get your questions answered, especially before purchasing or applying materials.

The USDA organic label is backed by a certification system that verifies farmers or handling facilities located anywhere in the world comply with the USDA Organic Regulations. Certification entails five steps:

STEP 1: Develop an organic system plan. The organic system plan is the foundation of the organic certification process. Created by the producer or handler seeking certification, it details how an operation will comply with the regulations based on its unique characteristics.

While plans differ based on operation type and needs, they address all practices of the farming or handling systems, such as tilling, grazing, harvesting, storing and transporting. They also specify approved substances used during the growing or handling process, monitoring practices for organic systems, recordkeeping systems, and barriers that prevent commingling with nonorganic products or contact with prohibited substances.

STEP 2: Implement the organic system plan. Have it reviewed by a certifying agent. Organic operations are certified by private, foreign or State entities that have been accredited by USDA. These entities are called <u>certifying agents</u> and are located throughout the United States and around the world. Certifying agents are responsible for ensuring that organic products meet all organic standards.

STEP 3: Receive inspection. Every operation that applies for organic certification is first inspected on site by a certifying agent. These comprehensive top-to-bottom inspections differ in scope depending on the farm or facility. For example, for crops they include inspection of fields, soil conditions, crop health, approaches to management of weeds and other crop pests, water systems, storage areas and equipment. For livestock, they include inspection of feed production and purchase records, feed rations, animal living conditions, preventative health management practices (e.g., vaccinations), health records, and the number and condition of animals present on the farm. At a handling or processing facility, an inspector evaluates the receiving, processing, and storage areas used for organic ingredients and finished products.

STEP 4: Have a certifying agent review the inspection report. The inspector presents findings to the certifying agent following observation of practices on the farm or facility as they compare to the organic system plan. In addition to the inspection points mentioned above, the inspector

also presents an assessment of the risk of contamination from prohibited materials and might even take soil, tissue or product samples as needed. The inspector also analyzes potential hazards and critical control points and makes sure procedures to prevent contamination are adequate. From there all findings are presented the certifying agent for review.

STEP 5: Receive a decision from the certifier. If an operation complies with the rules, the certifying agent issues an organic certificate listing products that can be sold as organic from that operation. The organic farm or facility continues to update its plan as it modifies its practices, and an inspection is done at least once a year to maintain certification.

References

Agricultural Marketing Service—National Organic Program [Online]. United States Department of Agriculture. Available at: http://www.ams.usda.gov/nop/ (verified 8 Dec 2008).

Ministry of Agricultural Development (MOAD), Nepal. Available at http://www.moad.gov.np/en/Retrieved on 09-11-2017

International Organic Inspection Manual IFOAM and IOIA, December 2000.

Organic Materials Review Institute www.OMRI.org
International Federation of Organic Agriculture Movements www.ifoam.org
Biodynamic Farming and Gardening Association
The National Organic Program (NOP) www.ams.usda.gov/nop