

AGMARK Grades and Standards

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In India, several Acts and Orders are in force for ensuring food quality and safety to the consumers. The concept of food quality assurance in India started with the enactment of Agricultural Produce (Grading & Marking) Act, 1937. This act streamlines the grading and marking of agricultural and other produce. The Act empowers the Central Government to make Rules for:

- a) fixing grade designations to indicate quality of any scheduled article.
- b) defining the quality indicated by every grade designation, and
- c) specifying grade designation marks to represent particular grade designation.

As per provision in Section 3 of the Act, General Grading and Marking Rules, 1988 are notified in which the detailed procedures for grant of Certificate of Authorisation, setting up of laboratories, issue of Certificate of Agmark Grading, action on irregularities, consumer protection measures, etc. are given. As on date, 105 specific Commodity Grading & Marking Rules covering 197 commodities are notified which provide information on commodity specific requirements relating to hygienic aspects, packaging, labelling and grade standards based on quality parameters.

Grade standards notified as per the provisions of the Act are popularly called AGMARK Standards. These standards differentiate between quality and 2-3 grades are prescribed for each commodity. Different grades are prescribed based on intrinsic quality of the agricultural commodities and various other parameters related to cleanliness, extraneous matter, active components, etc. Grades help farmers/traders to get prices for agricultural commodities commensurate with the quality produced by them. Consumers get the produce of the quality desired by them. Till date, grade standards for 197 agricultural commodities have been notified. These include cereals, pulses, oilseeds, fruits and vegetables, creamery butter & ghee, vegetable oils, spices, honey, wheat flour, besan, etc.

Directorate of Marketing & Inspection (DMI) in the Department of Agriculture & Cooperation, Ministry of Agriculture, Government of India is implementing the provisions of the Act.

Standardization and Grading of Agricultural Commodities

Grading provides description of the quality of the consignment and assists in the formation of a legally binding agreement. It facilitates proper marketing of agricultural commodities. It also ensures that agricultural commodities move through the market faster and without obstructions. This also facilitates transactions without physical verification by the distant buyers.

Advantages of Grading

- It brings confidence between the buyer and the seller.
- It facilitates interstate and international marketing.
- Disputes in the market can be solved amicably.
- Stability of the price is ensured.
- Farmers can take loans easily from the banks on the basis of grades of produce stored in the godown
- Arbitrary fixation of price by middlemen is eliminated.
- Brings about improvement of the crop.
- Reduces risk of producer and seller in transactions.
- Future marketing is facilitated. Grades become a commercial measure of quality.
- It also helps in implementation of contract farming.

Formulation of Grade Standards

Framing of standards of agricultural commodities is a complex process. There are hundreds of varieties of an agricultural commodity being grown in varied agroclimatic conditions. As such, there are wide variations in physical and chemical parameters. Standards of agricultural commodities are framed in a scientific way.

Basically, it involves the following steps:

- a) Agricultural commodity for which grade standards are to be framed is selected keeping in view national priority, necessity and demand.
- b) A sampling plan is prepared based on the areas in which the commodity is grown, processed and traded.
- c) Physical and chemical parameters to determine the purity and quality of the commodity are identified.
- d) Samples of the commodity are collected by the field offices from growing areas, whole sale and retail markets as per the sampling plan.
- e) The samples are analysed in the Regional Agmark Laboratories and Central Agmark Laboratory for the identified parameters.
- f) Analytical data obtained is statistically analysed and Central Agmark Laboratory suggests the limits of various quality parameters for different grades.
- g) The specifications of the commodity prescribed in Prevention of Food Adulteration Rules, 1955 and international standards viz. Codex Alimentarius Commission, ISO, etc. are consulted.
- h) The relevant Committee on Agmark standards discusses the draft standards with trade, industry and consumer organizations.
- i) Preliminary Grading & Marking Rules for the Commodity are drafted and are vetted by the Ministry of Law & Justice, translated into Hindi and published in the Gazette of India for inviting comments and suggestions from all stake holders.
- j) The comments/suggestions received are considered and final notification is drafted, vetted by the Ministry of Law & Justice, translated into Hindi and published in the Gazette of India.

Following Commodities on Agmark standards have been constituted (See <https://dmi.gov.in/GradesStandard.aspx>) :

1. Fibre Crops (aloe fibre, cotton, jute, palmyra fibre, sann hemp)
2. Pulses, Cereals etc.
3. Fruits & Vegetables
4. Vegetable Oils
5. Edible Nuts (arecanuts, cashew kernels, coconut, groundnuts, raw cashewnuts, walnuts, water chestnuts)
6. Spices and Condiments [ajowan seeds (whole and powdered), caraway and black caraway, cloves, compounded asafoetida, curry powder, mace, mixed masala powder, nutmeg, poppy seeds, saffron, seedless tamarind, spices, sun dried raw mango slices and powder, tejpat]
7. Live Stock (animal casings, bristles, creamery butter, ghee, goat hair, hides, raw meat (chilled or frozen), skins, table eggs, wool)
8. Agricultural & allied Products [agar agar, amla, bura sugar, catechu, chironji, cocoa beans, cocoa powder, dessicated coconut, dried tamarind & powder, guar gum, guar, gum karaya, honey, isubgol husk, jaggery, jatropha seeds, kangra tea, karanj seeds, lac, mahua, mango seed kernel, myrobalan, papain, puwad seeds, safed musli, senna leaves & pods, sheekakai, sugarcane gur (jaggery), tobacco (commercial), tamarind seeds & powder, tamarind (with seed), tapioca products (animal feed), tapioca sago, tendu (bidi wrapper) leaf, tobacco]

Grading and Certification of Agricultural Commodities

The grading activities are directed for the benefit of farmers and consumers while it also helps the traders in an efficient movement of the produce from the producers to the consumers. Grading is carried out in accordance with the standards notified and by following the established practices and procedures and as per the instructions issued under the provisions of the Act and Rules. It serves a means of describing the quality of commodities to be purchased or sold by the buyers or sellers all over the country and abroad. This also establishes a common trade language and avoids the need for physical checking and handling at many points.

Grading and certification activities can be broadly classified into

- a) Grading and Certification for Internal Trade
- b) Grading and Certification for Exports.

Grading and Certification for Internal Trade

The scheme for certification of agricultural commodities is voluntary except for blended edible vegetable oils and fat spread. Certification under AGMARK is mandatory for these commodities. The parties desirous of certifying an agricultural commodity under Agmark should have hygienic premises, necessary infrastructure to process and pack the commodity and access to a well-equipped laboratory for the estimation of prescribed parameters. They can either have their own laboratory or get attached with the State Grading Laboratory or Commercial Laboratory approved by the DMI for grading and marking of the commodities. There are more than one thousand approved laboratories in the country to attend to grading and marking. The Chemist of the laboratory is trained in one of the Regional Agmark Laboratories (RALs) and is approved for carrying out grading and marking. Certificate of Authorisation (C.A) is granted to such parties on their request after they submit the required documents and their capacity to process and pack the commodity is ascertained. The approved Chemist of the C.A. holder analyses the raw material and the processed commodity for determining the grade standard and gets it packed in his presence. Inspecting Officers of DMI frequently visit the authorised premises for carrying out inspections and draw check samples which are analysed in the RALs for ascertaining their conformance with the prescribed standards. Check samples are also drawn from the market and analysed in RALs.

There are more than six thousand Certificate of Authorisation holders throughout the country. These Certificate of Authorisation holders grade and mark the agricultural commodity through the laboratories approved for the purpose.

Vegetable oils, ghee, honey, creamery butter, spices, wheat atta, suji, maida, besan, etc. popularly graded and certified under AGMARK for domestic trade. Agmark certified products are pre-tested in the laboratories of the authorized packers as per the prescribed standards.

Grading and Certification for Exports

DMI is attending to certification of many agricultural commodities for exports. Essential oils and fruits and vegetables are important. European Commission has approved the conformity checking operations of DMI for pre-shipment inspection for export of fresh Fruits and Vegetables to EU countries. Agricultural Marketing Adviser has been notified as Official Authority and DMI as inspection body for the purpose. Inspection and certification is voluntary. DMI is attending to certification of fruits and vegetables for exports through approved laboratories.

Grapes and onions are being certified for exports. The certification involves conformance to grade standards prescribed in Fruits and Vegetables Grading and Marking Rules, 2004. The food safety parameters viz. residues of pesticides, heavy metals, etc. are required to be conformed to those specified in Codex Alimentarius Commission or importing countries requirements.

Infrastructure for the Certification Programmes

DMI is headed by Agricultural Marketing Adviser to the Government of India. DMI has head quarters at Faridabad and 11 Regional Offices and 26 Sub-offices spread all over the country to implement the certification programme. Head Office at Faridabad attends to the policy matters and framing/revision of standards. 11 RALs spread all over the country provide analytical support for the analysis of research samples and check samples drawn from the authorized packers' premises and market. These RALs analyse private samples also received from any stake holder on payment basis. Central Agmark Laboratory at Nagpur is the apex laboratory.

Role of Central Agmark Laboratory & Regional Agmark Laboratories

Directorate of Marketing & Inspection responsible for Agmark quality control system has set up 11 Regional Agmark Laboratories [RAL(s)] spread all over the country. The Central Agmark Laboratory (CAL) at Nagpur is the apex laboratory.

These RAL(s) are assigned to carry out the following important functions:

- a) Analysis of research samples of agricultural commodities for framing their standards
- b) Analysis of check samples of Agmark certified commodities for ensuring conformance with prescribed standards.
- c) Training to the chemists of authorised packers/approved laboratories in the grading of agricultural commodities.

CAL, Nagpur works as the apex laboratory and is primarily engaged in research activities and in association with RAL (s) also undertakes to

- a) evolve new methods and standardize the already existing methods of analysis / tests of food & agricultural commodities including meat products;
- b) formulation of specifications for new commodities for bringing under the purview of Agmark
- c) revision of Specifications of various commodities i.e. agricultural & food products including meat products etc,
- d) create awareness amongst consumers and traders with regard to grading, standardization and quality of various food & agricultural products.