

GOVERNMENT OF INDIA
MINISTRY OF AGRICULTURE AND FARMERS WELFARE
DEPARTMENT OF AGRICULTURE, COOPERATION AND FARMERS WELFARE

LOK SABHA
UNSTARRED QUESTION NO.3822
TO BE ANSWERED ON THE 22ND DECEMBER, 2015

AGMARK FOOD TESTING LABORATORIES

3822. SHRI JAGDAMBIKA PAL:

Will the Minister of AGRICULTURE AND FARMERS WELFARE कृषि एवं किसान कल्याण मंत्री be pleased to state:

- (a) the number of food testing laboratories currently operating under Agmark in the country and the details of tests carried out in these laboratories;
- (b) the details of agricultural produce/ commodities being certified and not certified by the Agmark laboratories;
- (c) whether the Government has felt the need to increase the number of these laboratories in the country and if so, the details thereof; and
- (d) the details of the steps taken by the Government to ensure that quality of testing is maintained at each of the laboratories?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE AND FARMERS WELFARE

कृषि एवं किसान कल्याण मंत्रालय में राज्य मंत्री (SHRI MOHANBHAI KUNDARIA)

(a): The number of laboratories currently operating under Agmark scheme include 183 Private commercial laboratories engaged in domestic grading of agriculture commodities and 18 Private commercial laboratories engaged in export grading of agriculture commodities. These private commercial laboratories are further monitored by 1 Central Agmark Laboratory (CAL) at Nagpur and 11 Regional Agmark Laboratories (RALs) under the Directorate of Marketing & Inspection (DMI).

Details of tests carried out in these laboratories are **Annexed**.

(b): Under the Agmark Scheme, certification of agriculture commodities is voluntary. Out of 213 agri commodities notified under Agmark, there is presently a demand only for the certification of following agri commodities, which are being certified as per the relevant Agmark Rule:

Rice, wheat *atta*, *suji*, *maida*, *besan*, fruit & vegetables (grapes, onions, okra) wheat, chillies, turmeric, pepper, cumin, poppy seed, whole *ajwain*, coriander, fennel, fenugreek, curry powder, compounded asafoetida, mixed *masala* powder, oil seeds (mustard seed, sesame seeds), vegetable oils (groundnut oil, mustard oil, sesame oil, coconut oil, castor oil, blended edible vegetable oil, maize oil, soya bean oil, fat spread), oil cakes (mustard oil cake), creamery butter, *ghee*, honey, Isabgol husk, tobacco. tapioca sago, seedless tamarind, edible nuts, pulses, table eggs.

Contd...2/-

(c): As per the Agmark scheme, private commercial laboratories seek approval of the Government for granting approval for Agmark Certification. As such, the scheme is voluntary in nature and there are no set targets for increasing the number of these laboratories.

(d): To ensure that quality of testing is maintained in each of the approved laboratories, all the chemists working on Agmark Certification in these laboratories are trained and approved by the DMI. Further the quality of testing is ensured by periodic inspection of approved laboratories and their check samples further tested at RALs and counter checked, if necessary at CAL. Out of 11 RALs, 08 have been accredited by the National Accreditation Board for Testing and Calibration Laboratories (NABL) and CAL is also NABL accredited.

Details of tests carried out in Agmark Laboratories**A . Export (Fruits & Vegetables) :**

Size, chemical & pesticides residues, heavy metals for export commodities.

B. Domestic trade:

- 1. Fat Spread :** Moisture, fat, salt, melting point, unsaponification matter, free fatty acid/acid value, vitamin A estimation .
- 2. Oil Seeds:** Percentage of inorganic and organic foreign matter, damaged discoloured weevilled grain, shrivelled immature, other oil seeds, moisture, oil content.
- 3. Oil Cake:** Moisture, total ash, acid insoluble ash, oil content, crude fibre, crude protein.
- 4. Spices :** Moisture, total ash, acid insoluble ash, non-volatile ether extract, crude fibre, starch, volatile oil, water soluble oil, cold water soluble extract, alcohol soluble extract, calcium as calcium oxide (CaO), test for added starch, test for added colour, sieve test, test for Lead.
- 5. Essential Oils :** Relative density, Refractive index, Optical Rotation, Solubility in alcohol, Acid value, Ester Value, Ester value after acetylation, Citral by bisulphite method, aldehyde/ ketone content by hydroxyl ammonium chloride method .
- 6. Vegetable Oils :** Refractive Index, moisture & insoluble impurities, acid value, saponification value, iodine value, specific gravity, Unsaponifiable Matter (USM), Bellier Turbidity Temperature (BTT), essential oil , Hydrocyanic Acid (HCN) , Hydrobromine test (HBr) , Thin Layer Chromatographic (TLC) test for argemone, TLC test for castor oil, TLC test for mineral oil, added colour, colour by tintometer, peroxide value.
- 7. Ghee:** Moisture, Refractive Index, Free Fatty Acid (FFA), Baudouin Test (BT), Reichardt Meissal (RM) value & Polenske Value (PV)
- 8. Butter :** Moisture, Refractive Index, Fat, Salt & Casein, FFA, BT, RM & PV.
- 9. Honey :** Moisture Content, Total Ash, Specific gravity, Fiches test, Aniline chloride test, Acidity, total reducing sugar, sucrose content, Fructose/Glucose ratio, total pollen content, Hydroxy Methyl Furfural (HMF) content, Optical density.
- 10. Food Grains & Allied Commodities :** Foreign matter, broken grains, fragments, damaged or discoloured, weevilled, chalky, other grains, moisture (Hot Air Oven method), total ash, acid insoluble ash, alcoholic acidity, protein, gluten content, crude fibre, uric acid, Sieve Test, Starch by Hydrolysis method, B-Oxalyl Amino Acid (BOAA) test, Oil content of oil seeds, Length /Breadth ratio (Rice).

Food safety parameters in Blended Edible Vegetable Oil (BEVO) & Fat Spread are tested by private Food Safety & Standards Authority of India (FSSAI) approved/ National Accreditation Board for Testing and Calibration Laboratories (NABL) accredited laboratories.
