

## Quality Specifications for selected MFPs

### (Fair Average Quality Grade)

#### 1. SPECIFICATION OF TAMARIND WITH SEED

##### A) General Characteristic:

1. Tamarind (with seed) shall be obtained from *Tamarindus indica* L. after removal of outer covering from the mature and ripe fruits.

##### 2. General Requirements:-

- i) Tamarind (with seed) shall be mature and ripe and have characteristic taste.
- ii) The color shall be pale yellow to brown.
- iii) Tamarind (with seeds) shall be free from rancid taste and musty odor.
- iv) Tamarind (with seed) shall be free from external moisture or any other deleterious substance.

##### B) Special Characteristic:

S.No.	Parameter	Maximum limits of tolerance
1.	Moisture content percent by (Max)	22.00
2.	Foreign matter (Organic and Inorganic percent by weight (Max)	5.00
3.	Damaged pods percent by mass or dry basis (Max)	3.00

##### Definition:

- i) Organic extraneous matter consists of vegetable matters of the plants other than the Tamarind pods and its seeds.
- ii) Inorganic extraneous matter consists of sand, stones, pebbles, lumps of earth, clay, mud etc.
- iii) Damaged pods means insect damaged pods and those which are devoid of pulp.

## 2. SPECIFICATION OF TAMARIND SEEDLESS

### A. General Characteristic

- i) The Tamarind pulp shall have been obtained from the mature fruits of the *Tamarindus indica* by removing first the rind and then the fibrous skeleton enclosing the pulp and the seeds.
- ii) The color of the pulp shall be light brown to dark black or mixture of light red to tinged brown and black colors or vice versa.
- iii) The pulp shall have the characteristic taste and flavor and shall be free from any obnoxious odor.
- iv) The pulp shall be free from added moisture, insect infestation or live insects, mould, rodent contamination and deleterious substances.

### B) Special Characteristic:

S.No.	Parameter	Maximum limits of tolerance
1.	Moisture content percent by (Max)	25.00
2.	Foreign matter (Organic and Inorganic percent by weight (Max)	12.00
3.	Seed content percent by weight (Max)	20.00

### Definition:

- i) Organic matter will consist of other parts of fruits such as fiber and rind.
- ii) Inorganic matter means stones, dust, dirt and any other foreign material of inorganic nature.

## 3. SPECIFICATION OF MAHUA SEED:

### A. General Characteristic:

Mahuwa seed shall be the cotyledons obtained after decorticating the seed from the fruit borne on the tree *Madhuca indica*, *Madhuca longifolia*, *Madhuca latifolia*.. Minimum requirement:-

- i. Mahuwa seed shall be wholesome, free from obnoxious smell, deleterious substances and other impurities.
- ii. Mahuwa seed shall have uniform shape, size and color (Yellow to Almond color).

B) Special Characteristic:

S.No.	Parameter	Maximum limits of tolerance
1.	Moisture content percent by (Max)	12.00
2.	Foreign matter percent by weight (Max)	6.00
3.	Damaged and broken seed percent by weight (Max)	15.00
4.	Oil percent by weight (Min.)	38.00

Definitions:

- i) Foreign matter: shall include dust stones, lumps of earth or leaves, and any other edible or non edible seeds.
- ii) Damaged seeds: shall be the seeds which are damaged mechanically or by mould or those showing internal discoloration or seeds materially affecting the quality.
- iii) Broken: shall include those seeds which are less than three – fourth but more than one-fourth of a whole seed.

4. SPECIFICATION OF SAL SEED

A. General Characteristic:

- i) Sal seed shall be dried ripe seed of *Shorea robusta*, family Dipterocarpacea.
- ii) Sal seeds shall have uniform size shape and color (light green to yellow);
- iii) Sal seed shall be wholesome, free from insect infestation, obnoxious smell, deleterious substance and other impurities.

B) Special Characteristic:

S.No.	Parameter	Maximum limits of tolerance
1.	Moisture content percent by (Max)	10.00
2.	Foreign matter percent by weight (Max)	4.00
3.	Split and broken seed percent by weight (Max)	15.00
4.	Oil percent by weight (Min.)	10.00

Definition:

- i) Foreign matter: shall include dust, stones, lumps of earth, leaves, and any other edible or non edible seed.
- ii) Split and broken seeds: splits shall be the seeds which are broken in two parts length-wise Broken seeds shall be those which are smaller than splits.

5. SPECIFICATION OF KARANJ SEEDS:

A. General Characteristic:

1. Karanj seed shall be obtained from clean, healthy and mature pods or beans of the plant *Pongamia pinnata* of family Leguminosae.
2. The Karanj Seeds shall be wholesome, mature, clean, dried and of characteristic size, shape, odor and color (brown).
3. It shall be free from insect infestation, artificial coloring matter, obnoxious flavor, rancidity and mustiness.

B) Special Characteristic:

S.No.	Parameter	Maximum limits of tolerance
1.	Moisture percent by (Max)	11.00
2.	Extraneous matter (Organic and Inorganic) percent by weight (Max)	5.00
3.	Broken seeds percent by weight (Max)	15.00
4.	Oil percent by weight (Min.)	20.00

Definition:

- i) Organic matter consists of leaves, twigs, stems, organic matters other than the karanj seeds.
- ii) Inorganic matter consists of metallic pieces, sand, gravel, dirt, pebbles, stones, lumps of earth, clay and mud, animal filth.
- iii) Insect infected seed means seeds which are wholly or partially bored or eaten by weevils.

6. SPECIFICATION OF CHIRONJI GUTHLI:

A. General Characteristic:

- i) Chironjee (seed) shall be obtained from *Buchanania lanzan* of family Anacardiaceae.
- ii) Chironjee shall be free from insectos infestation.
- iii) The Chironjee Seeds shall wholesome mature, clean & dried.
- iv) The Chironjee shall have characteristic size, shape & color (Gray to black).

B) Special Characteristic:

S.No.	Parameter	Maximum limits of tolerance
1.	Moisture percent by (Max)	14.00
2.	Foreign matter (Organic and Inorganic) percent by weight (Max)	5.00
3.	Broken and damaged seeds percent by weight (Max)	4.00
4.	Percentage of seed floating on water (Max)	10.00

7. SPECIFICATION OF MYROBALAN:

A. General Characteristic:

- i) Myrobalan shall be obtained from the plant *Terminalia chebulla* of family Combretaceae.
- ii) It shall be sound and solid nuts free from insect infestation.
- iii) Myrobalan shall have characteristic shape, size & colour (yellow to brown/ black) of the species found in the area.

B) Special Characteristic:

S.No.	Parameter	Maximum limits of tolerance
1.	Moisture percent by (Max)	11.00
2.	Extraneous matter (Organic and Inorganic) percent by weight (Max)	5.00

Definition:

Extraneous matter: this comprised dust, dirt, crushed matter, seeds and other foreign matter.

## 8. SPECIFICATION OF GUM KARAYA:

### A. General Characteristic:

- i) Gum Karya (crystal) is a vegetable gum produced as exudates by tree of the genus *Sterculia urens*.
- ii) Shall be reasonably dried.
- iii) It shall be free from fungus, insect infestation, rodent excreta etc.

### B) Special Characteristic:

S.No.	Color	Moisture % by weight (Max)	Bark and foreign matter % by weight
1.	White with slight grey and yellow cast	10.00	1.50
2.	Pale yellow to light tan and brown	10.00	3.00
3.	Brown to black and mixed.	10.00	10.00

Definition:

- i) Foreign matter shall include bark, leaves, dust, dirt, stone pieces or any other organic and inorganic matter other than Gum Karaya.

## 9. SPECIFICATION OF HONEY

### A. General Characteristic:

- i) Honey shall be obtained from well ripened honey combs.
- ii) Honey shall be of sweet taste & characteristic aroma.
- iii) Of uniform color throughout and may vary from light to dark brown.

- iv) It shall be free from visible mould, inorganic or organic matters such as insect, debris, brood or grains of sand dirt, pieces of beeswax, the fragments of bees and other insects and free from any other extraneous matter, microorganism.
- v) It should be free from any adulterants like molasses, corn syrup etc.

B) Special Characteristic of Honey:

S.No.	Parameter	Maximum limits of tolerance
1.	Specific gravity (Min)	1.35
2.	Moisture percent by (Max)	25.00
3.	pH	3.2-4.5
4.	Fiechos test	Negative

10. SPECIFICATION OF NEEM SEED

A. General Characteristic:

- i) Neem seed shall be dried ripe seed of *Azadirachta indica* family Meliaceae.
- ii) Neem seed shall be sound, clean, well dried, uniform in color, shape and size, free from insect infestation, live insect, dead insects, insect fragmentation, mould, mites, larvae and added coloring matter

B) Special Characteristic:

S.No.	Parameter	Maximum limits of tolerance in %
1.	Moisture content percent by (Max)	8.00
2.	Slightly damaged seeds weight (Max)	8.00
3.	Split and broken seed percent by weight (Max)	5.00
4.	Shriveled and immature (Max)	5.00
5.	Impurities (Max)	6.00
	Oil percent by weight (Min.)	22.00

Definition:

- i) Foreign matter: shall include dust, stones, lumps of earth, leaves, and any other edible or non edible seed.
- ii) Split and broken seeds: splits shall be the seeds which are broken in two parts length-wise Broken seeds shall be those which are smaller than splits.

## 11. SPECIFICATION OF KUSUM SEED

### A. General Characteristic:

- i) Kusum seed shall be dried ripe seed of *Schleichera oleosa* family Sapindaceae.
- ii) Kusum seed shall be sound, clean, well dried, uniform in color, shape and size, free from insect infestation, live insect, dead insects, insect fragmentation, mould, mites, larvae and added coloring matter

### B) Special Characteristic:

S.No.	Parameter	Maximum limits of tolerance in %
1.	Moisture content percent by (Max)	6.00
2.	Shriveled and immature & Damaged seeds ( Max)	4.00
3.	Oil percent by weight (Min.)	38 .00

## 12. SPECIFICATION OF GUGGL

### A. General Characteristic:

- i) Guggul (crystal) consist of exudates of *Commiphora wightii*.
- ii) Shall be reasonably dried.
- iii) It shall be free from fungus, insect infestation, rodent excreta etc.

### B) Special Characteristic:

S.No.	Color	Maximum limits of tolerance in %
1.	Foreign Matter ( Max)	4.00
2.	Total Ash ( Max)	5.00

### Definition:

- i) Foreign matter shall include bark, leaves, dust, dirt, stone pieces or any other organic and inorganic matter other than Gum Karaya.



### 13. SPECIFICATION OF BAHEDA

#### A. General Characteristic:

- i) Baheda is fruit of *Terminalia bellirica* family Combretaceae.
- ii) Baheda shall be sound, clean, well dried, uniform in color, shape and size, free from insect infestation, live insect, dead insects, insect fragmentation, mould, mites, larvae and added coloring matter

#### B) Special Characteristic:

S.No.	Parameter	Maximum limits of tolerance in %
1.	Foreign Matter (Max)	2.00
2.	Total Ash (Max)	7.00
3.	Acid Insoluble Ash (Max)	1.00

#### Definition:

- i) Foreign matter: shall include dust, stones, lumps of earth, leaves, and any other edible or non edible seed.

### 14. SPECIFICATION OF PUWAD SEEDS

#### A. General Characteristic:

- ii) Puwad seeds is fruit of *Cassia tora* or *Senna tora* family Fabaceae.
- iii) Puwad seeds shall be wholesome, mature, clean and dried.
- iv) mature, clean & dried.
- v) Puwad seeds shall be of characteristic size, shape and color, free from living and dead insect, insect fragments, mites, larvae. free from fungus infestation, mould growth.
- vi) free from added artificial coloring matter free from rodent hari and excreta, free from the seeds and *Argemone maxicana* (linn) and other toxic weeds free from rancidity and mustiness, free from objectionable taste and flavour.
- vii) The odour and flavour of the seeds when grind and moistened shall be free.

#### B) Special Characteristic:

S.No.	Parameter	Maximum limits of tolerance in %
1	Moisture (Max)	10.00
2	Organic extraneous matter (Max)	3.00
3	Inorganic extraneous matter (Max)	2.00
4	Broken seeds (Max)	5.00

5	Insect infected seeds (Max)	5.00
6	Total Ash (Max)	9.00

Definition:

- iii) Foreign matter: shall include dust, stones, lumps of earth, leaves, and any other edible or non edible seed.

## 15. SPECIFICATION OF SHEEKAKAI

A. General Characteristic:

- i. Sheekakai is fruit of *Acacia concinna* family Fabaceae.
- ii. Sheekakai should be sound, clean well dried, uniform in color, shape and size.
- iii. Free from insect infestations, live insect, dead insects, insect fragments, mould, mites, larvae and added coloring matter, free from fermented and musty odours, free from fungal growth

B) Special Characteristic:

S.No.	Parameter	Maximum limits of tolerance in %
1	Moisture (Max)	14.00
2	Organic extraneous matter (Max)	3.00
3	Inorganic extraneous matter (Max)	1.00
4	Damaged and insect bored pods (Max)	10.00
5	Loose seeds Max	2.00

Definition:

- a. Foreign matter: shall include dust, stones, lumps of earth, leaves, and any other edible or non edible seed.

## 16. SPECIFICATION OF SHATAVARI (ROOT)

A. General Characteristic:

- i) Shatavari is root of *Asparagus racemosus* family Asparagaceae.
- ii) It should be clean well dried.

- iii) Free from insect infestations, live insect, dead insects, insect fragments, mould, mites, larvae and added coloring matter, free from fermented and musty odours, free from fungal growth

B) Special Characteristic:

S.No.	Parameter	Maximum limits of tolerance in %
1	Foreign matter (Max)	1.00
2	Total Ash (Max)	8.00

Definition:

- iv) Foreign matter: shall include dust, stones, lumps of earth, leaves, and any other edible or non edible seed.

17. SPECIFICATION OF BAEL

A. General Characteristic:

- i) Bael is fruit of *Aegle marmelos* family Rutaceae.  
 ii) It should be clean well dried.  
 iii) Free from insect infestations, live insect, dead insects, insect fragments, mould, mites, larvae and added coloring matter, free from fermented and musty odours, free from fungal growth

B) Special Characteristic:

S.No.	Parameter	Maximum limits of tolerance in %
1	Foreign matter (Max)	1.00
2	Total Ash (Max)	4.00

Definition:

- iv) Foreign matter: shall include dust, stones, lumps of earth, leaves, and any other edible or non edible seed.

18. SPECIFICATION OF KALMEGH (DRIED LEAVES)

A. General Characteristic:

- i) Kalmegh is leaves of *Andrographis paniculata* family Acanthaceae.  
 ii) Leaves should be clean well dried

- iii) Free from insect infestations, live insect, dead insects, insect fragments, mould, mites, larvae and added coloring matter, free from fermented and musty odours, free from fungal growth

B) Special Characteristic:

S.No.	Parameter	Maximum limits of tolerance in %
1	Moisture (Max)	11.00
2	Total Ash (Max)	10.00

19. SPECIFICATION OF MADHUNASHINI/GUDMAR (ROOT)

A. General Characteristic:

- i) Madhunashini/ Gudmar is root of *Aegle marmelos* family Rutaceae.  
 ii) Root should be clean well dried  
 iii) Free from insect infestations, live insect, dead insects, insect fragments, mould, mites, larvae and added coloring matter, free from fermented and musty odours, free from fungal growth

B) Special Characteristic:

S.No.	Parameter	Maximum limits of tolerance in %
1	Foreign matter (Max)	2.00
2	Total Ash (Max)	0.60

Definition:

- a. Foreign matter: shall include dust, stones, lumps of earth, leaves, and any other edible or non edible seed.

20. SPECIFICATION OF NAGARMOTHA (RHIZOME)

A. General Characteristic:

- i) Nagarmotha is root of *Cyperus scariosus* family Cyperaceae.  
 ii) Root should be clean well dried  
 iii) Free from insect infestations, live insect, dead insects, insect fragments, mould, mites, larvae and added coloring matter, free from fermented and musty odours, free from fungal growth

B) Special Characteristic:

S.No.	Parameter	Maximum limits of tolerance in %
1	Foreign matter (Max)	2.00
2	Total Ash (Max)	8.00

Definition:

- a. Foreign matter: shall include dust, stones, lumps of earth, leaves, and any other edible or non edible seed.

21. SPECIFICATION OF NAGARMOTHA (RHIZOME)

A. General Characteristic:

- i. Nagarmotha is root of *Cyperus scariosus* family Cyperaceae.
- ii. Root should be clean well dried.
- iii. Free from insect infestations, live insect, dead insects, insect fragments, mould, mites, larvae and added coloring matter, free from fermented and musty odours, free from fungal growth

B) Special Characteristic:

S.No.	Parameter	Maximum limits of tolerance in %
1	Foreign matter (Max)	2.00
2	Total Ash (Max)	8.00

Definition:

- i. Foreign matter: shall include dust, stones, lumps of earth, leaves, and any other edible or non edible seed.