

Standard Operating Procedure (SOP) for Mango Export from Uttar Pradesh

1. Preparation Phase

a. Farmer/Grower Registration

- Register with DGFT (Directorate General of Foreign Trade) and get IEC (Importer - Exporter Code) <https://www.dgft.gov.in/CP/?opt=iec-profile-management>)
- Food Safety and Standards Authority of India (FSSAI) License
(<https://foscos.fssai.gov.in/>)
- Register with APEDA (Agricultural and Processed Food Products Export Development Authority) and get RCMC (**Registration cum Membership Certificate**)
(<https://www.dgft.gov.in/CP/?opt=e-rcmc>)
- Register orchards under APEDA “Hortinet” Traceability portal
(<https://apeda.gov.in/hortinet-static>) with help of DHO (District Horticulture Officer).
- Adopt Good Agricultural Practices (GAP) and Integrated Pest Management (IPM).

b. Variety Selection

- Choose export-preferred mango varieties like:
 - Dussehri (famous in UP)
 - Langra
 - Chausa
 - Amrapali
- Match variety to target country preference.

c. Pre-Harvest Preparation

- Avoid use of unapproved pesticides.
- Monitor for pests/diseases .
- Maintain a harvest and spray schedule logbook.
- Use mango bagging for good quality harvest.



2. Post-Harvest Handling

a. Harvesting

- Harvest at proper maturity stage.
- Avoid bruising and sap burns.
- Use clean tools and hygienic practices.
- Use mango Harvester developed by CISH, Lucknow.

b. Cleaning, Sorting and De-sapping

- Wash with clean water and fungicide (as per destination country regulation).
- Sort by size, maturity, and quality.
- Use de-sapping trays.

c. Hot Water Treatment (HWT) / Vapour Heat Treatment (VHT)

- VHT Mandatory for exports to countries like Japan, South Korea.
- HWT mandatory for European countries.
- Facility must be APEDA and DPPQS (Directorate of Plant Protection, Quarantine & Storage) -approved.

d. Packing

- Use ventilated, export-grade corrugated fibreboard boxes.
- Line with soft tissue or foam netting.
- Print batch no., orchard code, treatment details, and exporter's details.

3. Regulatory Compliance

a. Phytosanitary Certificate

- Apply at the Plant Quarantine Office (PQC) under Ministry of Agriculture.
- Include details of treatment (HWT/VHT/Irradiation).



b. Certificate of Origin

- Issued by DGFT or Chamber of Commerce.

(<https://coo.dgft.gov.in/>)

c. Fumigation (if required)

- For specific countries (e.g., USA), irradiation or fumigation is required.
- Done at approved facilities.

d. Pesticide residue compliances (MRL)

Pesticide residue compliance as per importing country-

- I. European countries pesticide database for mango
(<https://ec.europa.eu/food/plant/pesticides/eu-pesticides-database/start/screen/products/details/76>)
- II. Japan pesticide database for mango
(https://jpn-pesticides-database.go.jp/prdb/en/index_en.pl)
- III. United States pesticide database for mango
(<https://www.fas.usda.gov/maximum-residue-limits-mrl-database>)

e. Contaminant compliances (ML), heavy metal and mycotoxins (applied or natural)

4. Logistics and Transportation

a. Cold Chain Management

- Maintain cold chain from packhouse to port.
- Use Reefer trucks if needed.

b. Port Procedures

- Preferred ports: JNPT (Mumbai), Mundra, Kolkata (if sea), or IGI Airport (Delhi) for air.
- Ensure Customs clearance via ICEGATE portal.

5. Documentation Required

- Commercial Invoice
- Packing List



- Phytosanitary Certificate
- Certificate of Origin
- Shipping Bill (filed via ICEGATE)
- Bill of Lading / Airway Bill
- FSSAI License (for processed mangoes)

6. Key Agencies Involved

- APEDA – Export registration & approval
- PQIS (Plant Quarantine Information System) – Phytosanitary certification
- EIA – Inspection and Certification
- DGFT – Export licensing and Certificate of Origin
- FSSAI – For processed mango products
- Customs & ICEGATE – Export clearance

7. Country-Specific Requirements

Each country may have additional requirements:

- USA – Mandatory irradiation at APEDA-approved facility
- Japan – VHT & orchard registration
- EU – HWT and orchard registration
- Middle East – Preference for visual appeal and ripeness

8. Best Practices

- Digital traceability using blockchain or QR codes.
- Follow Global G.A.P. Certification for premium markets.
- Regular training for farmers and workers on hygiene and export protocols.



Uttar Pradesh Mango Export destinations:-

(A) Country-wise

Country	Value In Rs. Crore					Quantity In MT				
	2020-21	2021-22	2022-23	2023-24	2024-25 (April-January)	2020-21	2021-22	2022-23	2023-24	2024-25 (April-January)
Total	0.41	8.48	1.88	2.41	2.45	31.54	4,122.79	527.6	567.62	391.45
United Arab Emirates	0.19	0.32	0.49	0.72	1.15	12.35	42.83	55.74	62.91	103.55
Nepal	0.03	7.84	1.3	1.45	0.97	10.68	4,051.09	464.18	484.81	261.31
Oman	0.02	0.08	0.02	0.09	0.09	0.5	7.19	2.07	8.65	9.61
Saudi Arabia	0	0.02	0	0.02	0.08	0	2.89	0	0.6	5.33
United Kingdom	0.12	0.08	0.02	0.09	0.07	4.05	6.11	0.95	7.59	4.56
Qatar	0.04	0.14	0.03	0.04	0.03	2.82	12.68	1.96	2.81	2.4
Baharain	0	0	0.01	0	0.03	0	0	1.3	0.25	1.97
Kuwait	0	0	0	0	0.02	0.14	0	0	0	1.86
Russia	0	0	0.01	0	0.01	0	0	1.4	0	0.86
Germany	0.01	0	0	0	0	1	0	0	0	0

Source: DGCIS

(B) Variety-wise

HSCode	Product	Value In Rs. Crore					Quantity In MT				
		2020-21	2021-22	2022-23	2023-24	2024-25 (April-January)	2020-21	2021-22	2022-23	2023-24	2024-25 (April-January)
Total		0.42	8.49	1.87	2.41	2.44	31.55	4,122.80	527.59	567.63	391.44
8045024	Dasheri	0.16	0.31	0.17	0.46	0.93	8.37	34.01	20.37	48.22	154.79
8045029	Other Mangoes	0.02	3.93	1.33	0.17	0.91	6.88	2,001.62	466.49	17.09	179.1
8045025	Langda	0.11	0.21	0.31	0.2	0.36	6.24	23.79	34.57	17.53	31.11
8045028	Mallika	0.02	0	0	0.1	0.17	5.16	0	0.5	7.74	14.33
8045023	Chausa	0.11	0.11	0.06	1.44	0.07	4.9	12.4	5.66	465.05	12.11
8045021	Alphonso (Hapus)	0	3.93	0	0.04	0	0	2,050.98	0	12	0

Source: DGCIS

