

NSPM-24

Guidelines for Establishment of Pest Free Area



Government of India

Ministry of Agriculture & Farmers' Welfare

Department of Agriculture, Cooperation & Farmers' Welfare

Directorate of Plant Protection, Quarantine & Storage

N.H-IV, Faridabad-121001

April, 2020

Endorsement

This standard entitled '*Guidelines for establishment of Pest Free Area*' prepared by the Directorate of Plant Protection, Quarantine & Storage, Faridabad-121001 is for rendering guidance for creation, declaration and maintenance of pest free area as per provisions given in IPPC & related ISPMs.

This standard is duly approved for adoption and shall come into force from 15th April, 2020.

(Rajesh Malik)

Plant Protection Adviser

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Date: 15th April, 2020

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Review & Amendment

This standard will be subject to periodic review and amendment as may be decided by the Plant Protection Adviser (PPA). This standard shall be updated and revised with the advancement of techniques and need of the hour, if necessary. The holders of this standard shall ensure that the current edition of this standard is being used.

Control & Distribution of the standard

The master copy of this standard shall be held by PPA, Dte of Plant Protection Quarantine & Storage, Faridabad. This standard will be hosted on Directorate's website <http://plantquarantineindia.nic.in> in pdf format for access to all the stakeholders. The standard can be freely reproducible for official use and any alterations and modifications to this standard shall be made only with the written approval of PPA. Any enquiries regarding this standard shall be made to the Plant Protection Adviser (ppa@nic.in), Directorate of Plant Protection, Quarantine & Storage, NH-IV, Faridabad-121001.

INTRODUCTION

Scope

This standard sets out guidelines for creation, declaration and maintenance of pest free area (PFA). PFA is used as a phytosanitary measure for export of plant and plant products.

Background

Directorate of Plant Protection, Quarantine & Storage, Faridabad is a sub office under Department of Agriculture, Cooperation & Farmers Welfare, Ministry of Agriculture & Farmers Welfare, Government of India & acts as National Plant Protection Organization (NPPO) of India and has the responsibilities to look after activities of NPPO given in IPPC. As per Article IV (e) of IPPC one of the responsibility of NPPO is “*the protection of endangered areas and the designation, maintenance and surveillance of **pest free areas** and area of low pest prevalence.*”

In recent past a number of countries impose requirement of Pest Free Areas for various pests on a number of commodities. Such as Eurasian Economic Union as of 30.11.2016 decision No. 157 has notified special phytosanitary quarantine requirements that

i. “Grains, seeds of legume and oil crops and products of their processing must be imported into the customs territory of the Union from areas, places of production and production sites free from weed plants of the genus *Striga* spp.”

ii. Export of potato from production areas free from APMoV (Andean potato mottle virus, APLV (Andean potato latent virus, PVT (Potato T virus), PYV (Potato yellowing alfalfa virus); places of production and production sites free from pale potato cyst nematode (*Globodera pallida*), Columbia root-knot nematode (*Meloidogyne chitwoodi*), false Columbia root-knot nematode (*Meloidogyne fallax*), golden potato nematode (*Globodera rostochiensis*), smut of potato (*Thecaphora solani*), potato wart disease (*Synchytrium endobioticum*), bacterial wilt of potato (*Ralstonia solanacearum*), INSV (Impatiens necrotic spot virus) and PSTVd (Potato spindle tuber viroid).

Similarly, for export of Citrus fruits to European Union countries require PFA from *Xanthomonas citri* pv. *citri* and *Xanthomonas citri* pv. *aurantifolii*.

In addition, there are a number of pest, which are reported only in limited area of the country but create great hindrance in export of Agricultural commodities and has to export with unnecessary stringent measures. There is a need to create PFA for such pests also.

References:

IPPC text	International Plant Protection Convention 1997
ISPM 4	Requirements for the establishment of pest free areas (adopted in 1995)
ISPM 5	Glossary of phytosanitary terms
ISPM 6	Guidelines for Surveillance
ISPM 8	Determination of pest status in an area (adopted in 1998)
ISPM 9	Guidelines for pest eradication programmes (adopted in 1998)
ISPM 10	Requirements for the establishment of pest free places of production and pest free production sites (adopted in 1999)
ISPM 17	Pest reporting (adopted in 2002)
ISPM 26	Establishment of pest free areas for fruit flies (Tephritidae) (adopted in 2006, revised in 2014 and 2015. Ink amendments in 2018)
ISPM 29	Recognition of pest free areas and areas of low pest prevalence (adopted in 2007)
NSPM 13	Requirements for Establishment of Pest Free Area for Mango Nut (Seed) Weevil (<i>Sternuchus mangiferae</i>) and Pulp Weevil (<i>S. frigidus</i>)
NSPM 14	Requirements for Establishment of Pest Free Areas for Tephritid Fruit Flies

Definitions

Area	An officially defined country, part of a country or all or parts of several countries
Area of low pest prevalence	An area, whether all of a country, part of a country, or all or parts of several countries, as identified by the competent authorities, in which a specific pest is present at low levels and which is subject to effective surveillance or control measures

Buffer zone	An area surrounding or adjacent to an area officially delimited for phytosanitary purposes in order to minimize the probability of spread of the target pest into or out of the delimited area, and subject to phytosanitary or other control measures, if appropriate
Containment	Application of phytosanitary measures in and around an infested area to prevent spread of a pest
Corrective action plan (in an area)	Documented plan of phytosanitary actions to be implemented in an area officially delimited for phytosanitary purposes if a pest is detected or a tolerance level is exceeded or in the case of faulty implementation of officially established procedures
Delimiting survey	Survey conducted to establish the boundaries of an area considered to be infested by or free from a pest
Detection survey	Survey conducted in an area to determine if pests are present
Eradication	Application of phytosanitary measures to eliminate a pest from an area
Field	A plot of land with defined boundaries within a place of production on which a commodity is grown
Find free	To inspect a consignment, field or place of production and consider it to be free from a specific pest
Free from (of a consignment, field or place of production)	Without pests (or a specific pest) in numbers or quantities that can be detected by the application of phytosanitary procedures
Growing season	Period or periods of the year when plants actively grow in an area, place of production or production site
Host range	Species capable, under natural conditions, of sustaining a specific pest or other organism
Inspection	Official visual examination of plants, plant products or other regulated articles to determine if pests are present or to determine compliance with phytosanitary regulations
International Plant Protection Convention	International Plant Protection Convention, as deposited with FAO in Rome in 1951 and as subsequently amended
Monitoring survey	Ongoing survey to verify the characteristics of a pest population

Official	Established, authorized or performed by a national plant protection organization
Official Control	The active enforcement of mandatory phytosanitary regulations and the application of mandatory phytosanitary procedures with the objective of eradication or containment of quarantine pests or for the management of regulated non-quarantine pests
Pest	Any species, strain or biotype of plant, animal or pathogenic agent injurious to plants or plant products. Note: In the IPPC, “plant pest” is sometimes used for the term “pest”
Pest Free Area	An area in which a specific pest is absent as demonstrated by scientific evidence and in which, where appropriate, this condition is being officially maintained
Pest free place of production pest free production site	Place of production in which a specific pest is absent as demonstrated by scientific evidence and in which, where appropriate, this condition is being officially maintained for a defined period [A production site in which a specific pest is absent, as demonstrated by scientific evidence, and in which, where appropriate, this condition is being officially maintained for a defined period
Pest record	A document providing information concerning the presence or absence of a specific pest at a particular location at a certain time, within an area (usually a country) under described circumstances
Pest status	Presence or absence, at the present time, of a pest in an area, including where appropriate its distribution, as officially determined using expert judgement on the basis of current and historical pest records and other information
Pest diagnosis	The process of detection and identification of a pest
Phytosanitary action	An official operation, such as inspection, testing, surveillance or treatment, undertaken to implement phytosanitary measures
Phytosanitary measure (agreed interpretation)	Any legislation, regulation or official procedure having the purpose to prevent the introduction or spread of quarantine pests, or to limit the economic impact of regulated non-quarantine pests
Phytosanitary procedure	Any official method for implementing phytosanitary measures including the performance of inspections, tests, surveillance or treatments in connection with regulated pests
Phytosanitary regulation	Official rule to prevent the introduction or spread of quarantine pests, or to limit the economic impact of regulated non-quarantine pests, including establishment of procedures for phytosanitary certification

Place of production	Any premises or collection of fields operated as a single production or farming unit.
plant quarantine	All activities designed to prevent the introduction or spread of quarantine pests or to ensure their official control
Production site	A defined part of a place of production, that is managed as a separate unit for phytosanitary purposes
Quarantine pest	A pest of potential economic importance to the area endangered thereby and not yet present there, or present but not widely distributed and being officially controlled
Regulated area	An area into which, within which or from which plants, plant products and other regulated articles are subjected to phytosanitary measures
Surveillance	An official process which collects and records data on pest presence or absence by survey, monitoring or other procedures
Survey	An official procedure conducted over a defined period of time to determine the characteristics of a pest population or to determine which species are present in an area

Abbreviations used

ALPP	:	Area of low pest prevalence
APEDA	:	Agricultural and Processed Food Products Export Development Authority
DAC&FW	:	Department of Agriculture, Cooperation & Farmers Welfare
DPPQS	:	Directorate of Plant Protection, Quarantine & Storage
CIPMC	:	Central Integrated Pest Management Centre
ICAR	:	Indian Council of Agricultural Research
IPPC	:	International Plant Protection Convention
NPPO	:	National Plant Protection Organization
NSPM	:	International Measures for Phytosanitary Measures
PFA	:	Pest Free Area
PPA	:	Plant Protection Adviser
SAU	:	State Agricultural University
SHU	:	State Horticultural University

1. Requirement for establishment of PFA

1.1 Determination of PFA:

Biology of the pest concerned and its spread mechanism play an important role in identification of PFA and type of boundaries required determination of a PFA. PFAs are generally delimited by readily recognizable boundaries. These boundaries may be through administrative mechanism (e.g. state/ UT, district, block, taluk, village etc.), physical features (e.g. rivers, seas, mountain ranges, roads). While fixing the boundaries for PFA, zone of occurrence of the pests will be an important factor.

Potential PFA to be identified by State Agriculture/ Horticulture Department in consultation with ICAR, SAUs and CIPMC and inform DPPQS in **Annexure-I** and Pest Free status detail in **Annexure-II**.

1.2 Establishment of PFA

1.2.1 PFA can be established based on general surveillance data for absence of a pest in a particular area, which can be sourced from state Govt. Surveillance data, published literatures, ICAR, SAU reports, CIPMCs survey reports. If absence of target pest is proved by all available documented resources alongwith survey conducted by State & Central Government, DAC&FW can declare that area as PFA in **Annexure-III**.

1.2.2 Can be established by specific official surveys approved by NPPO- In the absence sufficient data to establish PFA status of a target pest then State Agriculture/ Horticulture Department Government to organize specific surveys during appropriate growing period of the crop as approved by DAC &FW involving CIPMCs, ICAR, SAU. If survey reveals absence of target pest in the potential PFA area then DAC&FW can declare that area as PFA. Proforma to be designed by ICAR, SAU & DPPQS based on type of target pest and associated host.

1.3 Measures to maintain PFA

1.3.1 Regulatory measures – Restriction of movement of plants, plant materials of other materials capable of carrying pest into PFA including buffer zone. In this regard, if required DAC&FW will notify domestic quarantine regulation under Section 4 of DIP Act that shall be implemented by State Agriculture/ Horticulture Department. In addition, respective State Agriculture/ Horticulture Department(s) may also impose restrictions for implementing domestic quarantine.

1.3.2 Routine monitoring- State Agriculture/ Horticulture Department, SAUs and CIPMCs will conduct regular surveillance in the PFA including buffer zone.

1.3.3 Extension advice to farmers- State Agriculture/ Horticulture Department, SAUs and CIPMCs will provide advisories to the farmers for maintenance freedom from target pest through training programme, dissemination of literatures through various media.

1.4 Checks to verify freedom has been maintained.

1.4.1 Phytosanitary inspection of consignment by the NPPO

1.4.2 Researchers, inspectors, farmers to notify the NPPO of any occurrences of the pest

1.4.3 Monitoring surveys- State Agriculture/ Horticulture Department, SAUs and CIPMCs will conduct monitoring survey to verify freedom frequency in a year will be based on type of pest & host association.

1.4.4 In the event of any detection of target pest in PFA area, DAC&FW will de-notify PFA.

2. Phytosanitary security of commodity: A back-ward linkage for traceability for phytosanitary security of commodity from production site to pack-house/ processing unit to export point to be established through:

2.1 Registration of Farms & Farmers by State Agriculture/ Horticulture Departments- Annexure-IV & V.

2.2 Registration of Pack-houses/ Processing units by DPPQS in association with Export promoting agencies such as APEDA, Spices Board etc. –as per related SOP.

2.3 Control over transportation from field to pack-house/ processing unit to export point – This will be ensured by registered Pack-houses/ Processing units. A register will be maintained for incoming and outgoing vehicle movement alongwith producer details.

2.4 Phytosanitary Inspection and Certification at Pack-houses/ Processing units by officer authorized by NPPO.

3. Documentation & review

The establishment and maintenance of a PFA should be adequately documented and periodically reviewed. It includes;

3.1 Data used to establish the PFA

3.2 Administrative measures taken for establishment of PFA

3.3 Details Area of PFA & buffer zone

3.4 Phytosanitary regulations applied

3.5 Technical details of surveillance, or survey and monitoring systems used.

3.6 SOP based on bilateral agreement wherever applicable.

4. Responsibility of stakeholders

4.1 Directorate of Plant Protection, Quarantine & Storage (DPPQS)

4.1.1 Revision of Standards time to time

4.1.2 Formulation and approval of survey plan in consultation with ICAR, SAU & State Agriculture/ Horticulture Department
4.1.3 Official survey in association with ICAR, SAU & State Agri. / Hort. Dept.

4.1.4 Declaration of Pest Free Area

4.1.5 Monitoring Survey

4.1.6 Getting recognition of PFA area by the importing countries

4.1.7 De-notification of PFA area

4.1.8 Notification of Domestic Quarantine

4.1.9 Phytosanitary inspection and certification

4.2 State Department of Agriculture/ Horticulture

4.2.1 Identification of potential Pest Free Area

4.2.2 Submission of request/ recommendation to DPPQS for declaration of PFA

4.2.3 Survey & Surveillance for determining absence or presence of pest.

4.2.4 Official survey in association with ICAR, SAU & CIPMC Declaration of Pest Free Area

4.2.5 Monitoring Survey

4.2.6 Preparation of Good Agriculture Practices (GAP) in consultation with ICAR/ SAUs / CIPMCs

4.2.7 Training to the farmers for adoption of GAP

4.2.8 Implementation of Domestic Quarantine

4.2.9 Registration of farmers

4.2.10 Creating awareness about maintenance of PFA among farmers and public

4.3 Indian Council of Agriculture Research (ICAR)

4.3.1 Assisting State Govt. for identification of potential Pest Free Area

4.3.2 Survey & Surveillance for determining absence or presence of pest.

4.3.3 Preparation of pest based survey modules for officials & monitoring survey

4.3.4 Official survey in association with ICAR, SAU & CIPMC as per approved.

4.3.5 Preparation of literature on identification & management of target pest

4.3.6 Identification of pests collected during survey

4.3.7 Preparation of pest based eradication protocol

4.3.8 Preparation of Good Agriculture Practices (GAP)

4.3.9 Training to Officials from State Department of Agriculture/ Horticulture

4.4 State Agricultural Universities (SAUs)

- 4.4.1 Assisting State Govt. for identification of potential Pest Free Area
- 4.4.2 Survey & Surveillance for determining absence or presence of pest.
- 4.4.5 Monitoring Survey
- 4.4.3 Preparation of pest based survey modules for officials & monitoring survey
- 4.4.4 Official survey in association with ICAR, SAU & CIPMC as per approved.
- 4.4.5 Preparation of literature on identification & management of target pest
- 4.4.6 Identification of pests collected during survey
- 4.4.7 Preparation of pest based eradication protocol
- 4.4.8 Preparation of Good Agriculture Practices (GAP)
- 4.4.9 Training to Officials from State Department of Agriculture/ Horticulture

4.5 Export promotion Agencies such as APEDA, Spice Board etc.

- 4.5.1 Assisting State Govt. for registration of farmers
- 4.5.2 Assisting DPPQS for registration of pack houses
- 4.5.3 Organizing workshop for awareness of Pest Free Area among various stake holders

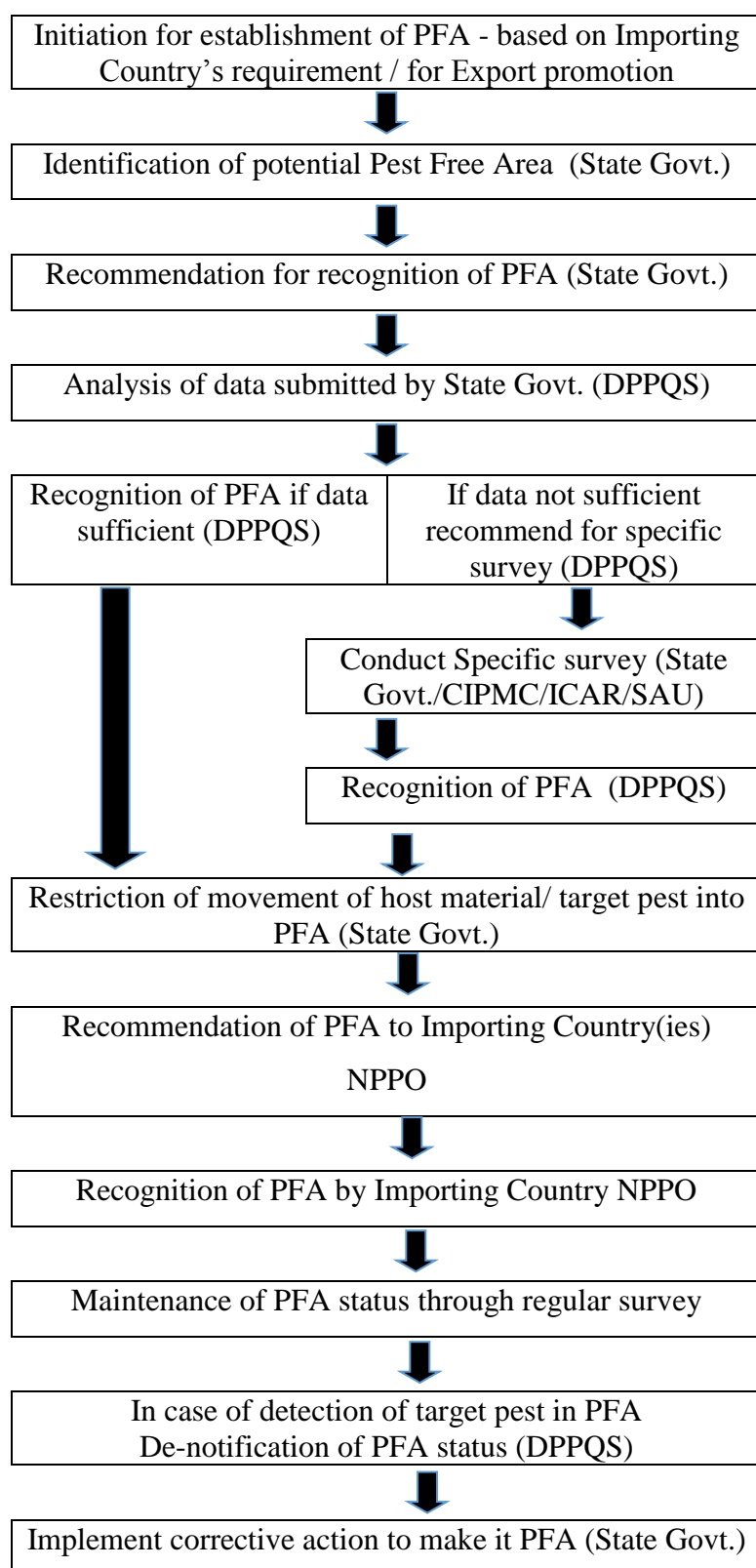
4.6 Pack house

- 4.6.1 Registration with NPPO
- 4.6.2 Maintaining records of produce sourced from PFA
- 4.6.3 Informing DPPQS/State Department on detection of target pest from PFA

4.7 Farmers

- 4.7.1 Registration with State Department of Agriculture/ Horticulture
- 4.7.2 Implementation of GAP
- 4.7.3 Maintaining pest record of the farm
- 4.7.4 Maintaining records of produce sourced from PFA
- 4.7.5 Informing State Department on detection of target pest from PFA
Students/ Researcher
- 4.7.6 Informing DPPQS/State Department on detection of target pest from PFA
Public
- 4.7.7 Abide instruction given in Domestic Quarantine for maintenance of PFA

PFA process flow-chart



Determination of potential PFA

STATE AGRICULTURE/ HORTICULTURE DEPARTMENT

OF.....

Sl. No.	Content	
1.	Name of target pest for establishment of PFA	
2.	Spread mechanism of the pest (✓Tick applicable)	<p>Primary inoculum- seed, other planting material, fruit, soil, others (specify).....</p> <p>Secondary spread -air, water, soil, vector, farm implements, others (specify).....</p>
3.	Host commodity including weeds available in the proposed area for the pest	
4.	Export potential commodities after establishment of PFA	
5.	Area identified for establishment of PFA	<p>Name of State-(If entire State to be declared PFA)</p> <p>Name of Districts*-</p> <p>Name of Taluks* –</p> <p>Name of villages*-</p> <p><i>Details to be attached with map showing boundaries alongwith latlong.</i></p>
6.	Area identified for buffer zone (based on pest, host, natural barrier).	
7.	Scientific basis for identification of PFA	Attach proof of absence of target pest which may include state Govt. Surveillance data, published literatures, ICAR, SAU reports, CIPMCs survey reports
8.	Regulatory restriction required for maintenance of PFA	

***Note 1-** When wider area is identified as PFA no need to provide smaller entity. If whole state no need to name districts, taluk, village, if whole district, no need to name taluk & village

Data on Pest Free Status**PART-I**

Scientific & common name of target pest:

Commodity targeted for export:

Area identified for PFA:

Whether pest was never reported (if yes give following details)

Sl. No.	Source (Enclose copy)	Period of survey (Specify years)	Whether survey conducted during infestation/ infection season (if yes specify)	Survey methodology used	Whether monitoring equipment used (if yes specify)	Space for DPPQS use*
1.	Report in Journals					Data sufficient to confirm PFA/ not sufficient
2.	Survey conducted by Central Government					Data sufficient to confirm PFA/ not sufficient
3.	Survey conducted by State Agriculture/ Horticulture Department					Data sufficient to confirm PFA/ not sufficient
4.	Survey conducted by Researcher (ICAR/SAU)					Data sufficient to confirm PFA/ not sufficient
5.	Survey conducted by NGOs/Stake holders					Data sufficient to confirm PFA/ not sufficient


IF reported and eradicated, provide details

(Director of Agriculture)
State of**PART-II****Recommendation of DPPQS**

Recommended for declaration of PFA

Data not sufficient, recommended for specific survey to confirm PFA

(Plant Protection Adviser)

<u>DECLARATION OF PEST FREE AREA</u>	
 सत्यमेव जयते	Government of India Ministry of Agriculture & Farmers Welfare (Department of Agriculture, Cooperation & Farmers' Welfare) Directorate of Plant Protection, Quarantine & Storage N.H-IV, Faridabad-121001
PFA Number:	Date of Issue:
<p><i>This is to certify that the area of State ofcovering (Acre/Ha.)</i> is declared as Pest Free Area from(Scientific and common name of pest).....</p> <p style="text-align: right;">() Plant Protection Adviser</p>	
Terms & Conditions: <ol style="list-style-type: none"> 1. The certificate is valid till PFA status is maintained. 2. The certificate will be cancelled on detection of above mentioned pest at any point of time. 	
Endorsements: Suspended/cancelled on by Reinstated on by	
Copy to: Concerned States, ICAR, SAU, Export promotion agency	

Annexure-IV

**Application for Registration/Renewal of farm for the export from PFA
(To be submitted by the farmer/exporter to State Deptt. of Agriculture/Horticulture)**

To,
The Registration Authority & Agriculture/Horticulture Officer
Taluka----- District -----State -----

Sub: Registration/Renewal of farm for the export of(Commodity name).....-reg

Dear Sir,

You are requested to kindly register / renew my farm for export of(Commodity name)....as per details given below:

1.	Full name of the Farmer/ grower						
	Father's /Husband's name						
	Name of partners						
a	Correspondence address						
	Village						
	Taluka						
	District						
	State						
	Telephone No with STD code no.						
	Mobile No.						
	E-mail address						
b	Farm/Plot location address (Survey No./ Plot No.) along with map/layout of the plot with indication of all sides of crop grown. (please attach)						
2.	Farm registration No. (In case of renewal)						
3.	Total Farm area (in Ha.)						
4.	Whether Farm is the Global GAP certified if yes, attach a copy						
	Certificate No.						
	Date of issue						
	Date of validity						
	Name of certification agency						
5.	Number of plots in the farm with area of each plot						
Sl. No.	Name of the crop	Area (in Ha)	Survey/plot No	Variety	Date of sowing/ plantation	Date (s) of Harvesting (expected)	Estimated production

							(MT)
6.	Name & address of warehouse /godown/processing unit associated with						
7.	Registration/ Renewal fee (if applicable)						
8.	Details about previous year export (Produce wise)						
	Quantity in MT						
	Name of Exporter						
	Name of warehouse/godown /processing unit						
9.	Whether any Non-compliance notification has been received during previous year						

It is certified that the information mentioned above is correct. We hereby undertake to abide by the guidelines/ conditions stipulated by State Agriculture/ Horticulture Department of

Date:
Place:

(Signature of the Farmer)
Name of the Farmer

Annexure-V

GOVERNMENT OF _____
DEPARTMENT OF _____

Certificate of Registration of Farm for Export from PFA

This is to certify that _____ is here by registered as
.....(Commodity(ies) name).... grower with the office of the, _____ for export of
.....(Commodity name).... for the year

The detail of the registered farmer is as follows:

Name of the Farmer:

Full Address:

Village

Taluk/Mandal

District

Sr.No.	Name of the crop & variety	Survey/GAT No	Plot No.	Area of Plot (Ha.)	Estimated production (MT)	Farm Reg. No.
1						
2						
3						
4						
5						
6						

1. Map Layout enclosed.
2. This Certificate is valid up to _____.
3. Have verified the Survey/GAT No. with respect to the registration and to the best of my knowledge, above information is correct.

Place:

Date:

Registration Authority
Agriculture/Horticulture