

DIRECTORATE OF

Animal Disease Diagnostic, Reporting & Surveillance, Livestock & Dairy Development, Punjab 16-Cooper Road, Lahore

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No.	Dated	/ 2022

To

- 1. The Director General (ERP), L&DD, South Punjab, Bahawalpur.
- 2. The Director General (Extension), L&DD, Punjab, Lahore.
- 3. The Director General (Research), L&DD, Punjab, Lahore.
- 4. The Director General (Production), L&DD, Punjab, Lahore.

Subject.

PRE-FLOOD ARRANGEMENTS FOR MONSOON-2022.

Kindly refer to the PDMA letter No. 786-2022/244/Tech dated 10-03-2022 (Copy enclosed) on the subject cited above.

the basis of past experiences and mentioned in above mentioned letter before the commencement of the rainy season.

Therefore, you are requested that the comprehensive flood contingency plans district wise should be collected / prepared immediately and same may be forwarded to this office upto 22-03-2022 (soft & hard copy) for onward transmission to the Admin Department.

An early action is requested, please.

DIRECTOR / FOCAL PERSON
PROVINCIAL FLOOD RELIEF CELL
L&DD, PUNJAB

No. 975-98 Dated 15-3-12022

Copy is submitted for information to:

- The Additional Secretary (Technical), L&DD, Punjab, Lahore.
- The Deputy Secretary (Technical), L&DD, Punjab, Lahore.

The Director Communication & Extension L&DD Punjab, Labore.

The Statistical Officer, L&DD, Punjab, Lahore.

of Communication & Exication &

DIRECTOR / FOCAL PERSON
PROVINCIAL FLOOD RELIEF CELL
L&DD, PUNJAB

FLOOD CONTINGENCY PLAN 2022



LIVESTOCK & DAIRY DEVELOPMENT DEPARTMENT

GOVERNMENT OF THE PUNJAB LAHORE

Email: dadrs786@gmail.com

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MISSION ASSIGNMENT

Mobilization of all available resources, and inputs to save livestock, protecting infra-structure, machinery, equipment, and stocks of resources etc. from damage and destruction caused by before and during flood / rainy season and to arrange feed and fodder for the animals during the flood emergencies in the flood prone areas.





Preamble:

Monsoons from the Bay of Bengal are the main source of summer rainfall from July to mid-September. The floods, flash floods and torrential rains from the hills are a phenomenon of common occurrence in Pakistan, especially during a monsoon. However, the mid-latitude westerly disturbances sometimes also contribute to the summer rainfalls. These episodes, on occasions, are largely detrimental to the economy, damaging crops, settlements, households, infrastructure and exterminating livestock and other valuable assets. The years of 2010, 2011, 2012, 2013 and 2014 witnessed the worst floods in the history of Pakistan, damaging crops, infrastructure, and settlements. This resulted in a significant loss of livestock while causing an unimaginable and prolonged suffering amongst the affected population.

The Livestock and Dairy Development Department is striving hard to facilitate livestock owner / farmers community in minimizing the losses due to the flood hazards. A comprehensive flood Fighting plan indicating Preparedness, Rescue, Relief, Recovery and Rehabilitation measures for the flood affected area has been prepared.

To streamline the implementation of planned activities, Terms of References (TORs) /Standard Operating Procedures (SOPs) for each position and institution has been articulated considering their present job description and responsibilities. These prescribed SOPS will support to mobilize and utilize all available resources / inputs to save large and small animals during flood emergency situation.

Suggestions in the light of experience/lesson learned during flood emergency.

The suggestions to combat flood havoc in 2022 in the light of past experience/ lesson learnt are:

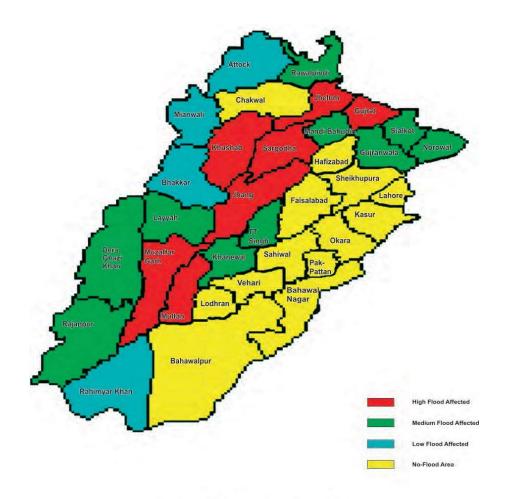
- 1. Preparedness of farmer for flood emergency.
- 2. Timely dissemination of information to livestock owner.
- 3. During the flood season vaccination should be undertaken only in animals with low protective titer.
- 4. The arrangements of feed & fodder must be made in the flood relief camps.
- 5. The adequate life-saving medicines/ anti-venoms should be available at the relief camps to treat any emergency case along with availability of instruments for minor surgical operations.
- 6. All the flood prone districts are to be given priority for the pre-flood arrangements.
- 7. Capacity Building of the staff in disaster management.
- 8. Availability of standard operating procedures.

All the flood activities in flood prone districts will be managed with the available resources in the districts.

FLOOD PRONE AREAS OF PUNJAB

The total area of Punjab Province is 51 million acres of which 7.7 million acres fall in the active flood zone.

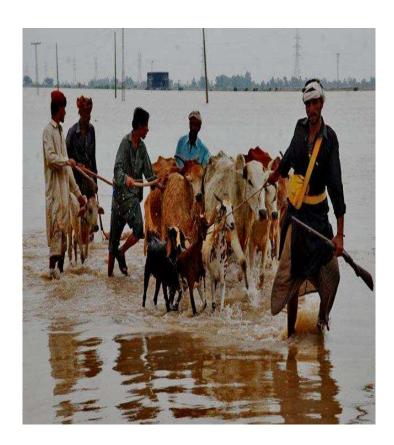
The floods in Ravi, Sutlej and Jhelum are caused mainly by heavy rainfall in the upper catchment areas during the monsoon season from July to September, when tropical storms come from the Bay of Bengal and occasionally from the Arabian Sea. The floods in Chenab and Indus however, originate from a combination of heavy rainfall and snow melting. Landslide and glacier movements may also caused flood in Indus.



Source: Health Department, Punjab Province

In the Punjab 5 rivers; Indus, Jhelum, Chenab, Ravi & Sutlej, respectively are irrigating the main area of Punjab. These rivers and Dake Nala affect the adjoining rural population during the heavy rains and ultimately create flood disaster in the areas which are detailed below:-

Indus Mianwali, Muzaffargarh, D.G.Khan, Bhakkar, L Rajanpur. Tehsil Koh e Suleman (Khad Buzdar, Sanger, N Wadoor)		
Jhelum	Jhelum, Gujrat, M.B.Din, Chakwal, Khushab and Sargodha.	
Chenab	Sialkot, Gujrat, Gujranwala, M.B.Din, Hafizabad, Sargodha, Chiniot, Jhang, Multan, Khanewal. Muzaffargarh, Rajanpur & R.Y.Khan	
Ravi	Sheikhupura, Okara, Sahiwal, Khanewal and Lahore.	
Dake Nala	Sialkot, Narowal,	
Sutlej	Kasur, Pakpattan, Vehari, Bahawalnagar, Bahawalpur, and Lodhran.	



Livestock Population of Flood Ravaged Districts

Sr. #	Districts	Large Animals	Small Animals	Poultry
1.	Chiniot	735041	208777	436286
2.	D.G.Khan	711467	1503472	1048648
3.	Gujranwala	852991	259292	702269
4.	Gujrat	559059	243697	275339
5.	Hafizabad	683667	130861	456865
6.	Jhang	2047989	1392042	1425237
7.	Jhelum	312548	362425	329776
8.	Kasur	1474588	464522	638304
9.	Bhakkar	990255	867878	813851
10.	Khushab	513356	696438	581427
11.	Layyah	883114	1076733	914498
12.	Mandi Bahauddin	794242	199513	564429
13.	Mianwali	648556	733597	764008
14.	Multan	915042	675025	729903
15.	Muzaffar Garh	1773128	1404378	1602519
16.	Narowal	467136	196021	250483
17.	Pakpattan	772635	375776	407852
18.	Rahim Yar Khan	1339391	1625623	1112841
19.	Rajanpur	572583	1025440	660628
20.	Sargodha	1262572	722010	895065
21.	Sialkot	884596	247560	370502
22.	Toba Tek Singh	712238	550767	400821
23.	Vehari	959236	736216	671519
	Total	20865430	15698063	16053070

Source: Punjab Livestock Census 2006

Components of Flood Plan, 2022

The plan is distributed with its activities in 3 main components with following positions, institutions or organizations responsible.

01: MITIGATION AND PREPAREDNESS:

(A) Responsible Position, institutions and organizations

- 1. Office of the Director Generals in central and South Punjab.
- 2. Divisional Directors.
- 3. Office of Director Animal Disease Diagnostic Reporting & Surveillance Punjab (Focal Person)
- 4. Office of Director Communication & Extension
- 5. Monitoring Squad / Directors and deputed officers
- 6. Provincial Flood Cell
- 7. Additional Directors

(B) Main Activities:

- 1. Preparation of Flood Emergency Plan
- 2. Capacity Building of staff
- 3. Preparedness of farmer for flood emergency though awareness campaign.
- 4. Antibody titration in the flood prone area.
- 5. Preventive Vaccination in animals with low antibody titer
- 6. Establishment of Flood Fighting Cell at district, divisional and provincial level.
- 7. Reserve dry fodder and stock of Wanda.
- 8. Stock piling of medicines and vaccines with proper inventory.

02: RESCUE AND RELIEF MEASURES

(A) Main Activities:

- 1. Establishment of Flood Relief Camps at flood hit areas and at CVD, levels
- 2. Displacement & Sheltering flood affected animals
- 3. Provision of Veterinary coverage.
- 4. Provision of Feed and fodder for flood affected animals

03: RECOVERY AND REHABILITATION MEASURES

(A) Responsible Position and institutions

- 1. Veterinary Officers / Flood Camps
- 2. Deputy Directors / Flood Sectors
- 3. Additional Directors
- 4. Divisional Directors
- 5. DGs (Ext. / Res. / Prod.) and DG South Punjab.

(B) Main Activities:

- 1. Estimation of flood losses.
- 2. Provision of veterinary coverage on regular basis.
- 3. Provision & distribution of feed supplements with fodder round a year.
- 4. Facilitation of shelter for flood affected animals

MONITORING SQUAD:

To monitor the planned activities the Director Generals will supervise overall activities and Director General South Punjab will supervise all the activities in South Punjab. The Divisional Directors will supervise all the activities in their concerned division.

The Director, Animal Disease Diagnostic Reporting & Surveillance L&DD, Punjab, Lahore will work as coordinator of the whole plan and will consolidate the data / reports for onward transmission to Administrative Department.

The Director Animal Disease Diagnostic Reporting & Surveillance will also keep close contact with each Director/Monitoring Officer and report to higher-ups in case of any problem in the Districts

In case of flood onset / emergency, the following Directors will also perform their duties as Checking/Monitoring Squad.

- 1. Director, Veterinary Research Institute, Lahore.
- 2. Chief Research Officer, Buffalo Research Institute, Pattoki, Kasur.
- 3. Additional Director, Foot & Mouth Section, Veterinary Research Institute, Lahore.
- 4. Director, Poultry Research Institute, Rawalpindi
- 5. Incharge of all livestock farms in their concerned district.

Responsibilities of Monitoring Squad:

The Monitoring squad will be responsible to check and evaluate the following flood related activities:-

- 1. Checking of Flood Sector/Camps according to Flood plan, 2022.
- 2. Checking of Veterinary and Para veterinary staff deployed as per flood plan.
- 3. Checking of the arrangements made by the Additional Directors concerned in his district.

- (a) Stock of Sera / Vaccines
- (b) Stock of Anmol Wanda
- 4. Checking of Tools of Communication including:-
 - (a) Computer, Telephone & Internet connection.
 - (b) Media campaign (Banners, Handouts, Pamphlets, FM radio, Local Newspaper and Community Awareness Meetings).
- 5. Checking of physical resources
 - (a) Mobile Veterinary Dispensaries (MVDs)
 - (b) Mobile Diagnostic Laboratories.
 - (c) Vehicles with POL & Necessary Equipments / Accessories.
 - (d) Stationery and other office equipments.
- 6. Checking of storage points for Wanda, Vaccines and Medicines.
- 7. Disposal of reports regarding issues relating to Non-release of Funds/Non-provision of Medicines, Vaccines, Wanda and may be sent immediately with the recommendations
- 8. Monitoring of veterinary services (treatment, vaccination if needed, technical guidance).
- 9. To provide guidance to the concerned Additional Director.

FLOOD ARRANGEMENTS

Pre-flood Arrangements:

In the areas where occurrence of floods is a regular phenomenon, preparedness is considered as one of the main activities to save life and property of the people. Preparedness which includes three Ps—Plans, Preparations and Provisions are to be made in advance for carrying out activities when the area is being hit by the floods. The primary objective of the preparedness is to allow the passage of flood with minimum damage to lives and properties of the communities.

The followings are the arrangements, to cope with any emergency during floods.

A. FLOOD CONTINGENCY PLAN, 2022.

Office of Director Animal Disease Diagnostic Reporting & Surveillance, Punjab, Lahore, will prepare the Flood Contingency Plan of Livestock and Dairy Development Department after incooperating all the data received from the Divisional Directors and it will be submitted to the Secretary, Government of the Punjab, Livestock and Dairy Development for onward transmission to the Office of Punjab Disaster Management Authority (PDMA).

B. ESTABLISHMENT OF FLOOD CELL:

Provincial Flood Relief Cell (PFRC) will be established in the office of Director Animal Disease Diagnostic Reporting & Surveillance, Livestock Complex, 16-Cooper Road, Lahore w.e.f 15-05-2022. The cell is being headed by Director Animal Disease Diagnostic Reporting & Surveillance. The services of the two veterinarians from the fields will be attached with the office of Director Animal Disease Diagnostic Reporting & Surveillance, Livestock Complex, 16-Cooper Road, Lahore, for the purpose of working in the Flood Cell.

Provincial Flood Relief Cell will work in two shifts; i.e. 1st shift from 9:00(A.M) to 4:00(P.M) and 2nd shift from 4:00(P.M) to 10:00(P.M) in case of emergency only, w.e.f. 15-05-2022. At the event of declaration of flood calamity, a third shift will start working from 10:00 PM to 09:00 AM, for facilitating the field veterinary staff as well as livestock owners as regard with the vaccination in flood prone/affected areas/districts

C. ESTABLISHMENT OF DISTRICT FLOOD CELLS:

District Flood Cells will be established in the office of Divisional Directors & respective Additional director and these will work under the supervision of an officer and two office assistants w.e.f. 15-5-2022.

D. LAISON DUTY

- Focal Person Provincial Flood Cell will coordinate with PDMA to jointly identify appropriate actions for reducing vulnerability of community to flood.
- Additional Directors will maintain close contact with the Deputy Commissioner (In-charge District Flood Emergency Controlling Cell)/District Officers of Revenue/Agri Department to seek instruction and pass on relevant data. The concerned Additional Directors will also depute a responsible official to work in the control room day and night.
- Deputy Directors (DDL) at Tehsil level will laison with Deputy District Officer Revenue and share well information and seek the help if necessary.

E. CAPACITY BUILDING:

Each Additional Director will be responsible for the conduction of training/ workshops for his staff on Livestock Emergency Guidelines and Standards (LEGS) and preparedness of farmer through awareness campaign.

F. STAFF DEPLOYMENT

Livestock Department has established **410** sectors and **314** sub-sectors in the districts of Punjab. For the operationalization of pre, during and post flood activities, **843**Veterinary Officers, **3446** Veterinary Assistants, **190** Mobile Veterinary Dispensaries & **42** mobile diagnostic laboratories digitally linked with 7.5 million famers across 25,892 villages have been deployed for the implementation of Flood Contingency Plan -2022, in their respective areas. The concerned staff will collect and disseminate information pertaining to flood related activities to the District Flood Cells

SUMMARY

Flood Sectors	410
Flood Sub-Sectors	314
Veterinary Officers	843
Veterinary Assistants	3446
Mobile Veterinary Dispensaries	190
Mobile veterinary Diagnostic laboratories	42
Motorcycles	7731

DISTRICT-WISE INFORMATION FOR FLOOD EMERGENCY -2022.

Sr. No	District	Sectors	Subsectors	V.Hs	CVDs	A.I. Centers	Diag. Labs	P. Labs	VOs	VAs	MVDs
1.	Attock	5	17	9	31	2	1	0	5	87	5
2.	Bahawalnagar	6	20	21	76	5	1	0	10	36	5
3.	Bahawalpur	13	23	0	17	0	1	0	13	52	5
4.	Bhakkar	16	0	1	8	0	1	0	8	35	5
5.	Chakwal	5	12	14	59	9	1	0	18	83	5
6.	Chiniot	7	9	5	36	1	1	0	31	103	4
7.	D.G.Khan	36	18	13	60	0	1	0	49	197	9
8.	Faisalabad	6	14	40	54	9	1	1	62	253	5
9.	Gujrat	15	0	19	45	4	1	0	15	91	4
10.	Gujranwala	16	0	18	66	0	1	1	31	136	5
11.	Hafizabad	6	0	8	33	1	1	0	14	68	4
12.	Jhang	18	0	7	40	0	1	0	64	170	7
13.	Jhelum	3	20	6	2	0	1	0	4	20	4
14.	Kasur	8	0	2	4	0	1	0	17	26	5
15.	Khanewal	13	0	12	14	6	1	0	18	141	5
16.	Khushab	9	0	16	22	1	1	0	8	87	4
17.	Lahore	5	7	24	5	8	1	0	30	133	16
18.	Layyah	8	2	9	64	1	1	0	31	109	6
19.	Lodhran	11	11	6	13	0	1	0	8	125	4
20.	M.B.Din	3	10	12	17	2	1	0	9	57	4
21.	Mianwali	15	25	15	18	2	1	0	9	45	5
22.	M.Garh	35	0	16	88	8	0	0	110	208	5
23.	Multan	34	0	16	21	2	1	0	12	70	5
24.	Nankana Sahib	7	0	12	42	3	1	0	9	11	4
25.	Narowal	17	0	20	10	2	1	0	16	97	4
26.	Okara	8	9	1	17	0	1	0	11	24	5
27.	Pakpattan	8	0	7	30	4	1	1	20	94	4
28.	R.Y.Khan	8	20	27	31	5	1	0	26	160	5
29.	Rajanpur	3	32	0	11	0	1	0	17	67	6
30.	Rawalpindi	15	43	4	8	0	1	1	4	13	5
31.	Sahiwal	7	1	13	70	7	1	0	14	22	5
32.	Sargodha	10	0	32	106	0	1	0	40	190	7
33.	Sialkot	4	12	23	11	6	1	0	11	123	5
34.	Shaikhupura	9	9	16	72	0	1	0	63	143	5
35.	T.T.Singh	8	0	21	26	5	1	1	25	118	4
36.	Vehari	13	0	23	31	0	1	0	11	52	5
	Total	410	314	488	1258	93	35	5	843	3446	190

G. DEPARTMENTAL SPOKESMAN:

Director Communication and Extension L&DD Department will responsible for the followings:

- 1. Community Awareness Programs
- 2. Co-ordination with media
- 3. Media coverage of all official meetings and important events
- 4. Preparation of Directory of all flood sectors important telephone numbers

H. PROCUREMENT:

i. Vaccines:

- **a.** Sufficient quantity of different type of vaccines is available.
- **b.** District wise vaccination plan is being implemented to ensure 100% coverage, against HS in cattle / buffalo, against BQ in cattle, against CP, PPR, ET in sheep / goat and against ND in backyard poultry.
- **c.** District Diagnostic Laboratories are regularly monitoring the immune status of animals in flood prone areas and the animals with low antibody titers in flood prone area will be revaccinated accordingly.

ii. Medicines:

- **a.** All Additional Directors have been directed to retain at least 20% quota of life saving veterinary medicines, as a reserve stock in each district.
- **b.** Sufficient Stock of Medicines is available at Provincial (BRI Pattoki) & Tehsil level Store.

iii. Cold chain Supply system

- **a.** Cold chain facility at Tehsil and each CVH / CVD is available with 300 fridges & de freezers. Cold chain facility will be maintained up to UC level through ice pack / ice gel.
- **b.** Cold chain truck in each division is available (two chambers, one for Medicine and other for vaccine) provided.
- c. Every VA has ice box & ice gel.

iv. Feed and Fooder:

- **a.** Pre-qualification of firms for the supply of Wanda during flood 2022 has been initiated.
- **b.** The tendering will be made by Livestock department and after completing the procedure of pre-qualification the rate contract will be sent to the concerned Deputy Commissioner.
- **c.** Deputy Commissioner is responsible to calculate the requirement of Wanda in their concerned districts. They will send their demand to livestock department which will be communicated to the concerned qualified firm to supply the Wanda to the concerned Deputy Commissioner.
- **d.** The payment will be made by the concerned Deputy Commissioner.

I. MOBILE VETERINARY DISPENSARIES (MVDS)

a. 190 Mobile Veterinary Dispensaries (MVDs) along with essential staff has been deputed by the districts for flood activities.

b. The preventive & treatment veterinary health care services (vaccination, treatment and deworming facilities) will be provided through MVD's as and when and where required throughout the flood prone areas.



J. AWARENESS CAMPAIGN:

- **a.** For raising awareness and increasing the capacity of the communities services will be at village level.
- **b.** Vehicles fitted with loud speaker and banner are available for flood prone areas
- **c.** All districts are instructed to develop flags/caps/T-shirts with departmental logo for the staff engaged in flood relief activities.
- **d.** The Director, Communication and Extension, L&DD will co-ordinate with all stakeholders during the awareness campaign.



K. VETERINARY SERVICES

a. Feed

Provision of feed in affected areas to the animals.

b. Treatment

Treatment and de-worming of the affected / displaced animals during flood is a regular feature.

c. Disease Monitoring

The ADIOs of each district will conduct disease monitoring especially in the disease prone areas so that any untoward incidence may be handle accordingly.



LIST OF VACCINES USED IN FLOOD PRONE DISTRICTS

Sr. #	Vaccine type	Animal type
1	(a) Hemorrhagic Septicemia Vaccine (HSV) (b) Black Quarter Vaccine (BQV)	Cattle & Buffaloes
2	(a) Caprine Pleuropneumonia Vaccine (CPV),(b) Peste-Des-Petits Ruminates Vaccine (PPRV),(c) Enterotoxaemia Vaccine (ETV)	Sheep & Goats
3	New Castle Disease Vaccine (NDV)	Poultry
	List of Vaccine used in Flood Prone Distr	icts on demand
1	Foot and Mouth Disease Vaccine (FMDV)	Cattle & buffaloes
4	Sheep Pox Vaccine (SPV)	Sheep
5	Goat Pox Vaccine (GPV)	Goats
6	Fowl Pox Vaccine (FPV)	Poultry

Achievements in flood 2021

Activities	Large animals	Small Animals	Poultry
Vaccination	8,204,504	6,388,055	5,615,188
Treatment	415,435	307,176	
Deworming	444,068	436,307	

ARRANGEMENTS DURING FLOOD

- 1. Organizing rescue operations of animals from flood affected areas
- 2. Monitoring of the health conditions of the affected animals in the relief camps and provision of treatment.
- 3. Provision of feed & fodder to the affected animals
- 4. Treatment of wounded and sick animals
- 5. Vaccination in case of disease outbreak.
- 6. Monitoring of all activities carried out in flood affected areas of the districts and keeping record of important activities conducted, on day to day basis.
- 7. Maintaining communication link with the Provincial Flood Cell and informing on regular basis about the flood situation in the area.
- 8. Coordination with external assisting institutions for rescue and relief operations
- 9. Mobilization of all available resources and possible assets for emergency interventions

POST-FLOOD ARRANGEMENTS

- 1. Supply of feed and fodder and monitoring of its availability.
- 2. Mobilizing veterinary personnel to the places for the provision of treatment and emergency vaccination in cases of outbreak.
- 3. Liaison with other relief agencies.
- 4. Fair distribution of the relief materials
- 5. Assessing damage caused by the flood
- 6. Preparing immediate restoration plan and identify who is doing what (persons, committee and external agencies)
- 7. Coordinating external restoration activities
- 8. Educating people in reviving the damaged fodder crops and facilitate them in getting seed, fertilizers and external support.
- 9. Reviewing the effectiveness of the preparedness measures and decide what the deficiencies are and what improvements are necessary in the preparedness for the next flood
- 10. Keeping record of all the flood events and the associated damages caused, together with the activities conducted in response to the flood.
- 11. Mapping and a detailed inventory of resources and services available at district level to assess the risk and vulnerability involved in a community as well as for the mitigation planning.
- 12. Maintaining the record of the use of material in stock, expenditure and relief material received from external agencies and their uses and expenditure.

STANDARD OPERATING PROCEDURES (SOPs)

Standard Operating Procedures (SOPs)

Standard protocols and guidelines have been prepared to address all priority issues as part of preparedness, response and recovery plans.

SOP for Provincial Flood Cell

The Provincial Flood Cell is the main body to coordinate and integrate the flood relief activities by Livestock and Dairy Development Department, at 16 – Cooper Road, Lahore, Phone: 042-99201116.

Main Functions

- 1. Preparation of Flood Emergency Plan
- 2. Ensure continuous supply of vaccine to district / field
- 3. Working of Flood Emergency Cell round the clock
- 4. Collection, compilation and communication of daily flood reports
- 5. Direct coordination with DGs (Ext) in Flood Relief Measures
- 6. Consolidate flood damages
 - a. Close liaison with other secretariat, flood relief departments,
 - b. Organizations and relevant institutes
- 7. The cell will work as a bridge between Field and Admin Department for the provision of timely flood relief measures in flood affected areas.
- 8. Coordination with the PDMA/NDMA during flood season

SOP FOR ADDITIONAL DIRECTORS IN FLOOD, 2022.

- 1. The Additional Director will coordinate with both the Local and Provincial administration.
- 2. The Additional Director will be responsible to arrange Medicine, Vaccine, Fodder and Vanda in flood emergency.
- 3. The Additional Director will ensure safe housing for the flood affected animals in co-ordination with District Administration.
- 4. The Additional Director will arrange Mobile Veterinary Dispensaries' and POL for its operation.
- 5. The Additional Director will depute Rapid Response Team/Staff in the Sectors and Camps in their districts.
- 6. The Additional Director will be responsible for implementing and follow up of the instructions circulated by the department from time to time.
- 7. The Additional Director will be responsible for providing the information regarding flood plan, 2022 from the districts to the department.

8. The Additional Director will work at Tehsil level and the DDL working at district headquarter will co-ordinate all flood activities regarding vaccines/medicines distribution or any other assignment.

SOP's FOR VO's FOR FLOOD, 2022

- 1. Will be Incharge of the particular Flood Sector / Camp.
- 2. Will coordinate with the other allied departments in the sector.
- 3. Will manage and control the working of Veterinary Assistants in handling the flood/Emergency cases.
- 4. Will make all arrangements for community awareness and will educate about preparedness of flood.
- 5. Will communicate his daily, weekly and monthly reports to his respective Additional Director.
- 6. Will adopt strategies for control of infectious and zoonotic diseases in the area.
- 7. Will maintain proper record/data of the activities being carried out in a relevant registers along with record keeping of contact numbers of the farmers for verification and feedback as and when required.

SOP'S FOR FOCAL PERSON REGARDING MEDIA CAMPAIGN

- 1. The Director, Communication and Extension L& DD Punjab Lahore will be responsible for media campaign.
- 2. Will coordinate with media personnel's for publishing flood reports/information.
- 3. Will arrange the community awareness programs in the flood affected districts.
- 4. Will be responsible for media coverage of all official meetings regarding Flood Relief Activities.
- 5. Will be responsible for the coverage of all important events during flood emergencies.
- 6. Will be the official spokesman of L&DD department and will be responsible for all the information released in Electronic/Press Media.
- 7. Will also be responsible for provision of badges caps, cards, banners, leaflets, booklets etc. to the staff deputed for flood duties.
- 8. Will compile a telephone directory of staff deputed in flood campaign by L&DD Department Punjab and will launch it on Departmental website.
- 9. Will also coordinate with the PDMA/NDMA during flood season.

SOP for Mobile Veterinary Laboratories:-

- 1. All the MVLs must be in working conditions.
- 2. All the MVLs would be fully equipped with emergency kits and sample collection materials.
- 3. All the MVLs would be under control Of Director Animals Disease Diagnostic & Surveillance Punjab, Lahore

SOP for Mobile Veterinary Dispensaries:-

For regular and uninterrupted supply of medicines& vaccines, MVD's will be arranged according to the priority:-

- 1. All the MVDs must be in working conditions.
- 2. All the MVDs will be fully equipped with emergency kits, life-saving medicines & anti venom etc.

The arrangements of MVDs in flood prone Divisions /Districts are managed as under: -

Vehicles at District Level:

List of all the Govt. Vehicles working in districts of Punjab will be prepared by the concerned officers and these vehicles will be available and used as MVDs in case of flood emergency.

- 1. All the above arrangements will be made in case of declaring emergency due to Flood/heavy rains.
- 2. POL charges for MVDs will be met by the respective Additional Director.
- 3. All MVDs will be shifted with drivers.
- 4. In case of flood emergency, all the vehicles of ADIO's will work under the control of concerned Additional Director
- 5. The vehicles which are not in use presently in various organizations like VRI, BRI, Livestock farms will be kept as reserve for use in flood emergency
- 6. A motor pool officer/transport officer will be nominated at provincial & districts level to manage and streamline the transport issues.

SOPs for Wanda procurement/distribution

- 1. Assessment of Wanda requirement by Additional Directors of flood prone districts in consultation with DCs.
- 2. Distribution and record keeping of Wanda will be responsibility of Additional Directors.

SOPs for Rapid Response Team (RRT)

- 1. RRT comprise of Four VOs and Eight VAs will be constituted by concerned Additional Director and same will be communicated to I/C Flood Cell.
- 2. The team will move immediately during any emergency and will be monitored by Additional Director/ District Administration.
- 3. Necessary logistics and equipments will be provided by concerned Additional Director.
- 4. District Outbreak Handling Unit will support Rapid Response Team in Disease Diagnosis, Surveillance, and Reporting and disease control in the area.

SOPS FOR HANDLING DISEASE OUTBREAK

The field veterinary staff is observing following measures to control the Notifiable animal diseases in Punjab.

1. Initial recording and reporting

Any incidence or occurrence of Notifiable animal disease will be recorded and reported by the concerned field veterinary staff to District Disease Reporting Officer (ADIO) through the concerned Additional Livestock officer immediately.

2. Technical Action

District Disease Outbreak Handling (DOBH) Unit will launch its disease outbreak handling activities by reporting to concerned higher-ups.

i. Approach to affected area

The DOBH Unit comprises of Additional Director Livestock, Assistant Disease Investigation Officer and Veterinary Officer concerned will chalk out appropriate measure as per demand of the situation.

ii. Isolation of affected animals

The affected animals will be isolated from other animals. The quarantine measures will be observed as per demand of situation.

iii. <u>Disinfection of the area</u>

The affected area will be disinfected with appropriate disinfectant. Moreover Bio-security measures will be adopted as per need.

v. Disease confirmation

After clinical diagnosis appropriate samples will be collected from the diseased animals.

vi. Samples collection, preservation, dispatch and recording

The appropriate sample will be collected, preserved and dispatched to the nearest diagnostic laboratory as per specified protocol of the disease. The proper record of the sample will be maintained at the lab level.

vii. Postmortem

The postmortem of the dead animal will be conducted and appropriate sample will be collected after observing all preventive measures and sent to the lab for further investigation.

viii. Carcass disposal

The carcass of the dead animals will be dispose off as per protocol of the disease.

ix. Social action

Considering the severity /emergency of the disease, the community will be involved and taken into confidence to control the disease and to avoid further losses. The awareness of the farmer will be enhanced through local and district media and vaccination and others disease control measures will be launched in the area.