

Disaster management planning to fight against COVID-19 war

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Abstract

In this paper systematic planning and analysis of disaster management is provided. It includes all health related parameters, supporting service parameters and communication/awareness parameters. Also, it includes one unique and new disaster plan to fight against the COVID-19 war is developed and it is referred by 'MAHABHARATH GRANTH' (CHAKRAVYUVHA).

1. Introduction

Corona virus disease (COVID-19) is an infection disease caused by a newly discovered corona virus. Most people infected with the covid-19 virus in all over the world. In India, the covid-19 cases are increasing day by day. So it is very essential and important to protect people and proper handle the covid-19 cases.

2. Disaster Management Model

In this model village/city/Tehsil/district/state/India as a central position. For disaster management, in parameter 1 the following factors should be analyzed and studied.

1. Social Factor- It is direct affected to peoples and it is related to all social problems study analysis and applications to society and understand the psychological and mental barrier.

2. Economical Factor- It is very important to study and analysis of economical and financial condition of peoples.

3. Political Factor- It is very important to study and analysis of philosophy and psychology of local political leaders.

4. Demographic Factor- Socioeconomics characteristics of a population expressed statistically such as age, sex, educational level, income level, marital status, occupation, religion, birth rate, death rate, average size of family etc. All the above demographic factors should be studied and analyzed.

5. Market Factor- It is related to current market /business situation condition and also analyzed the market capability requirements and its trends.

6. Ecological Factor-

It is related to current ecological and environmental condition and it should be studied and analyzed.

7. Technological Factor- It is related to existing technological advance knowledge and application.

8. Human Factor- It is related to about ethics, Humanity, Human error, safety, comfort and work environment.

In parameter 2 following essentials are required.

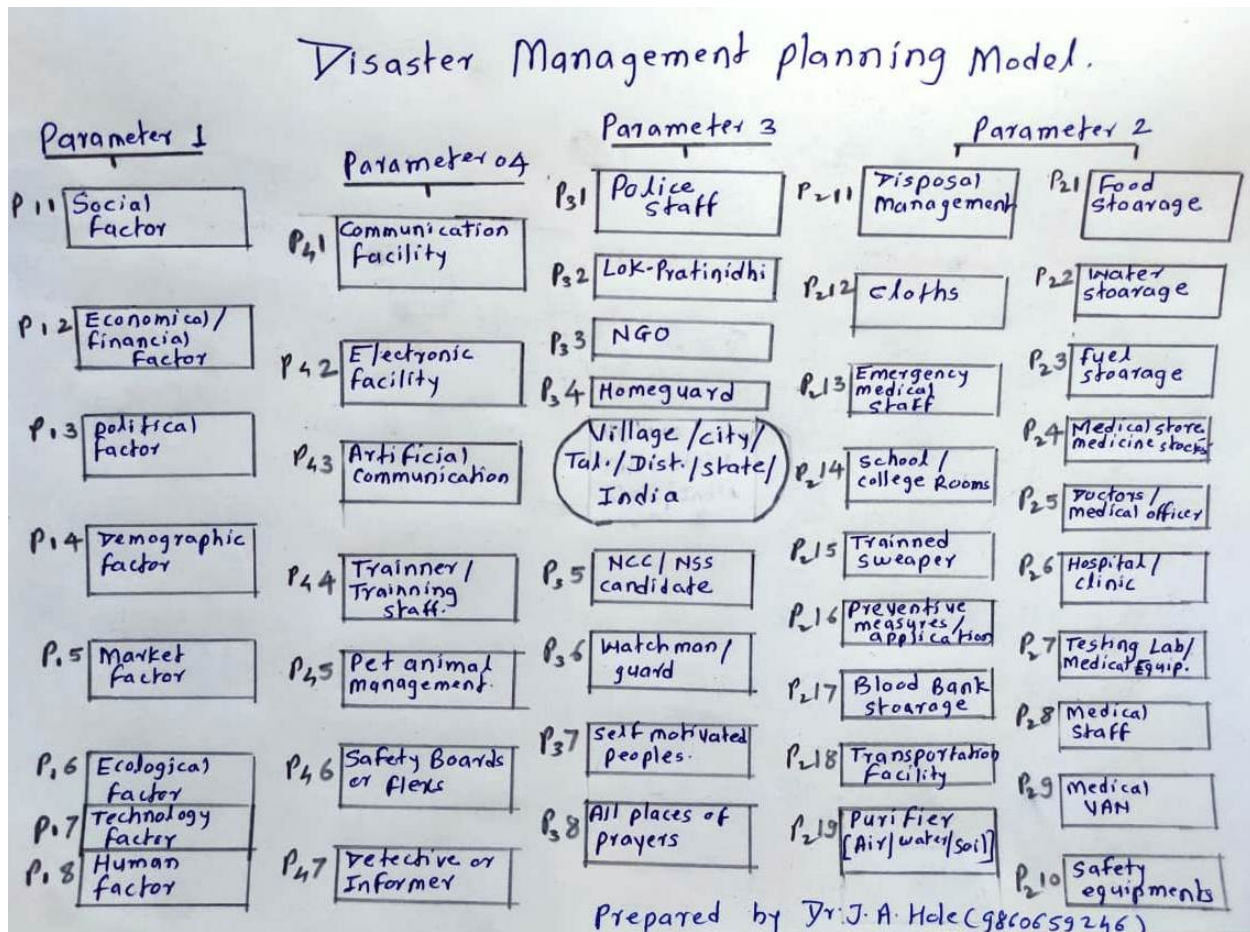
1. Food Storage- sufficient food storage
2. Water Storage- proper method of water management
3. Fuel storage- systematic planning of fuel management
4. Medical store/medical stock
5. Doctors/Medical officers
6. Hospitals/Clinics
7. Testing's labs / Medical equipment
8. Medical Vans
9. Safety Equipment
10. Disposal management
11. Cloths with sufficient stocks
12. Emergency medical staff- these are local peoples and this should be well medically trained.
13. School/Colleges- sufficient rooms for emergency or more no. cases
14. Transportation facility
15. Sweeper with proper training
16. Preventive measures/ Application
17. Blood Bank storage
18. Purifier
19. Medical Staff

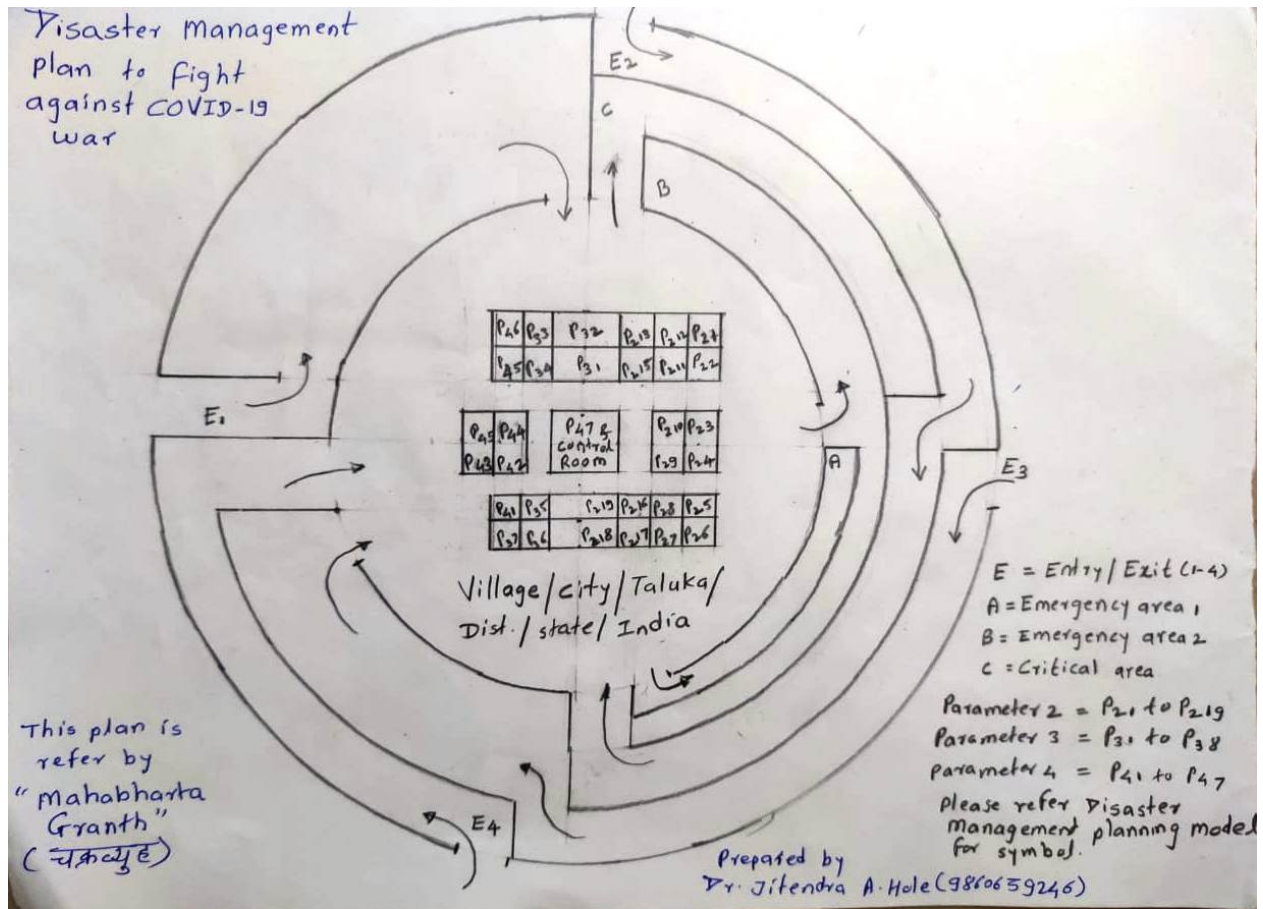
In Parameter 3 below mentioned essentials are required.

1. Police staff
2. Lokpratinidhi
3. Trained NGO (Non govt. organization)
4. Home guard
5. NCC/NSS candidate with proper training
6. Watchman/guard
7. Self motivated people
8. All places of prayers:- for public awareness only in social media

In Parameter 4 following essentials are required.

1. Communication Facility:- Internet, mobile, phones etc.
2. Electronic Facility:- TV, Radio, Computer, laptop
3. Artificial Communication:- Whisting, flags, movement of hand/legs etc.
4. Trainer/Training staff:- medical protection/safety etc. training given to unskill staff/people.
5. PET animals management
6. Safety Boards/ Flex for awareness
7. Detective or Informer of central government.





Sr. No.	Parameter 2	For Population 1000-5000		For Population 5000-10000		For Population 10000-50000		For Population 50000-100000		For Population 100000-200000		For Population 200000-500000		For Population 500000-1000000		For Population 1000000-5000000		For Population 5000000-10000000	
		No. of person/items	Budget	No. of person/items	Budget	No. of person/items	Budget	No. of person/items	Budget	No. of person/items	Budget	No. of person/items	Budget	No. of person/items	Budget	No. of person/items	Budget	No. of person/items	Budget
1	Food Storage	1	100000	1	200000	2	500000	5	700000	10	1000000	20	2000000	50	5000000	100	10000000	500	50000000
2	Water Storage	1	100000	1	100000	2	100000	5	200000	10	200000	20	500000	50	500000	100	1000000	500	2000000
3	Fuel storage	1	0	1	200000	2	500000	5	700000	10	1000000	20	2000000	50	5000000	100	10000000	500	50000000
4	Medical store/medical stock	1	200000	2	400000	4	800000	6	1200000	10	2000000	20	4000000	50	10000000	100	20000000	500	1E+08
5	Hospitals/Clinics	1	200000	2	400000	4	800000	5	1000000	10	2000000	20	4000000	50	10000000	100	20000000	500	1E+08
6	Testing stations / medical equipment	1	200000	1	200000	1	200000	1	200000	2	400000	2	400000	2	400000	3	600000	3	600000
7	Doctors/Medical officers (Rs.3000 per day)	2	6000	4	12000	6	18000	8	24000	10	30000	20	60000	50	150000	100	300000	500	1500000
8	Medical Staff (Rs.1500 per day)	3	4500	5	7500	10	15000	50	75000	100	150000	200	300000	500	750000	1000	1500000	5000	7500000
9	Medical Vans (Rs.3000 per day)	1	3000	1	3000	2	6000	2	6000	3	9000	3	9000	4	12000	5	15000	5	15000
10	Disposal management (Rs.5000 per day)	1	5000	1	5000	1	5000	1	5000	2	10000	2	10000	3	15000	4	20000	5	25000
11	Safety Equipment (Rs.500 per piece)	1000	500000	5000	2500000	7000	3500000	10000	5000000	15000	7500000	20000	1 crore	40000	2 crore	50000	2.5 crore	70000	3.5 crore
12	Cloths (Rs.200 per cloth)	3000	600000	7000	1400000	10000	2000000	20000	4000000	50000	1 crore	70000	1.4 crore	80000	1.6 crore	90000	1.8 crore	100000	20 crore
13	Emergency medical staff (Rs.1000 per day)	5	5000	10	10000	15	15000	20	20000	50	50000	100	100000	200	200000	400	400000	500	500000
14	School/Colleges rooms (Rs.100 rent per day)	50	5000	70	7000	100	10000	150	15000	200	20000	300	30000	500	50000	700	70000	1000	100000
15	Trained Sweep per (Rs.1000 per day)	10	10000	15	15000	20	20000	50	50000	100	100000	200	200000	500	500000	1000	1000000	5000	5000000
16	Preventive measures/ Application (Rs.5000 per location)	10	50000	15	75000	20	100000	50	250000	100	500000	200	1000000	500	2500000	1000	5000000	5000	7500000
17	Blood Bank storage (Rs.5000 per day)	1	5000	1	5000	1	5000	2	10000	2	10000	5	25000	5	25000	7	35000	7	35000
18	Transportation facility (Van) (Rs.2000 per day)	5	10000	7	140000	10	20000	50	100000	100	200000	200	400000	500	1000000	1000	2000000	2000	4000000
19	Purifier (Air/Water/Soil) (Rs.20000 per day)	1	20000	1	20000	1	20000	1	20000	2	40000	2	40000	4	80000	5	100000	5	100000

Sr. No.	Parameter 3	For Population 1000-5000		For Population 5000-10000		For Population 10000-50000		For Population 50000-100000		For Population 100000-200000		For Population 200000-500000		For Population 500000-1000000		For Population 1000000-5000000		For Population 5000000-10000000	
		No. of person/ items	Budget	No. of person/ items	Budget	No. of person/ items	Budget	No. of person/ items	Budget	No. of person/ items	Budget	No. of person/ items	Budget	No. of person/ items	Budget	No. of person/ items	Budget	No. of person/ items	Budget
1	Police staff (Rs.2000 per day)	2	4000	4	8000	10	20000	50	100000	100	200000	200	400000	500	1000000	1000	2000000	2000	4000000
2	Lok pratinidhi (Rs.2000 per day)	2	4000	3	6000	4	8000	4	8000	6	12000	6	12000	8	16000	10	20000	10	20000
3	NGO (Rs.2000 per day)	2	4000	4	8000	4	8000	4	8000	6	12000	6	12000	8	16000	10	20000	10	20000
4	Home guard (Rs.1000 per day)	2	2000	4	4000	10	10000	50	50000	100	100000	200	200000	500	500000	1000	1000000	2000	2000000
5	NCC/NSS Candidate (Rs.500 per day)	2	1000	4	2000	6	3000	6	3000	6	3000	8	4000	8	4000	8	4000	10	5000
6	Watchman/guard (Rs.1000 per day)	2	2000	4	4000	10	10000	50	50000	100	100000	200	200000	500	500000	1000	1000000	2000	2000000
7	Self motivated people (Rs.2000 per day)	2	4000	4	8000	10	20000	50	100000	100	200000	200	400000	300	600000	400	800000	500	1000000
8	All places of prayers: (Rs.2000 per day)	2	4000	2	4000	3	6000	4	8000	5	10000	7	140000	8	16000	9	18000	10	20000

Sr. No.	Parameter 4	For Population 1000-5000		For Population 5000-10000		For Population 10000-50000		For Population 50000-100000		For Population 100000-200000		For Population 200000-500000		For Population 500000-1000000		For Population 1000000-5000000		For Population 5000000-10000000	
		No. of person/ items	Budget	No. of person/ items	Budget	No. of person/ items	Budget	No. of person/ items	Budget	No. of person/ items	Budget	No. of person/ items	Budget	No. of person/ items	Budget	No. of person/ items	Budget	No. of person/ items	Budget
1	Communication Facility	Compulsory		Compulsory		Compulsory		Compulsory		Compulsory		Compulsory		Compulsory		Compulsory		Compulsory	
2	Electronic Facility	Compulsory		Compulsory		Compulsory		Compulsory		Compulsory		Compulsory		Compulsory		Compulsory		Compulsory	
3	Artificial Communication (Rs.1000 per day)	2	2000	5	5000	10	10000	50	50000	100	100000	200	200000	500	500000	1000	1000000	2000	2000000
4	PET animals management (Rs.5000 per day)	1	5000	1	5000	1	5000	2	10000	2	10000	4	20000	4	20000	5	25000	5	25000
5	Safety Boards/ Flex for awareness (Rs.500 per board)	2	1000	5	2500	10	5000	50	25000	100	50000	200	100000	500	250000	1000	500000	2000	1000000
6	Trainer/Training staff (Rs.2000 per person)	1	2000	1	2000	1	2000	3	6000	5	10000	10	20000	50	100000	70	140000	100	200000
7	Detective or Informer of central government (Rs.2000 per person)	1	2000	1	2000	1	2000	2	4000	4	8000	5	10000	8	16000	10	20000	12	24000

3. Disaster Management Planning

In this disaster management planning diagram shows the overall systematic planning. In this figure city/village is at central location and four entry/exit are shown and also shows their direction.

In the given diagram shows emergency area 1 for stage 1 patients, emergency area for stage 2 patients and critical area shows for stage 3 patients.

At location E_1 , E_2 , E_3 , E_4 , one policeman and one medical officer must be present for checking. At the entry of city/village on Lokpratinidhi and one person from given model should be present for observation

4. Conclusion

This disaster management planning model includes the different parameters essential to fight against COVID-19 war. Parameter 1 is the overall understanding and analysis of region/area. Parameter 2 is the essential needs of disaster management. Parameter 3 is supporting service provider parameter. Parameter 4 is communication/ awareness parameter.

Also, in this paper unique plan of disaster management is used and it is referred by MAHABHARATH GRANTH (CHAKRAVYUVHA). So it is concluded that this model is useful to help and reduced the stress and provide proper work environment for fighting against COVID-19 war.