



### I. Introduction

#### **BACKGROUND**

Cyclone Yaas that originated in the Bay of Bengal, made landfall on May 26 in the coastal district of Balasore, Odisha, unleashing torrential rain and windstorm, blowing away thatched houses, uprooting trees, electric poles and inundating low-lying towns and villages. It was reportedly the 96th tropical cyclone to batter the state in the past 130 years and the second one to hit India, following Tauktae. in a week. Nearly 35 per cent of all cyclonic storms that crossed the eastern coast of India have affected Odisha<sup>1</sup>. The temperament of the Bay of Bengal, high surface temperatures of the sea, and the vagaries of climate changes have become a deadly trifecta that can trigger powerful cyclones.

Although the official death toll was low, the damage to property and livelihood has been severe. People were unable to save their livestock or their life's savings. With the exacerbation of extreme weather events, cause for concern grows among the people of Odisha, and particularly the disproportionately impacted Scheduled Castes and Scheduled Tribes. These communities have always lived in the uncertainty of cyclones and floods, navigating the precarity of caste and ethnic vulnerabilities that cause them to be disproportionately affected. But as the storms become more frequent and floods more severe, the road to restitution and recovery remains uncertain.

#### **OBJECTIVES AND PROCESS**

With this backdrop, a proposal for assessment of social inclusion was presented to the Special Relief Commissioner (SRC) and the OSDMA jointly by NDW-NCDHR, Sphere India and ALVM on June 6, which they accepted and gave formal permission on June 16. The objectives of the assessment were to (i) facilitate people's access to relief entitlements as per N/SDRF Norms, and (ii) make recommendations in areas of relief a covery.

At the orientation workshop for the enumerators on June 28, the District Collector, Bhadrak, led the opening session on the SDRF Norms, followed by other sessions from the line-departments. This purposive sample-based assessment covered 7600 households of the SC. ST and OBC with general communities and vulnerable groups, across 35 panchayats spanning five revenue blocks in Balasore, Bhadrak and Mayurbhani districts. The assessment was carried out from July 5 to 15 adhering strictly to Covid-19

#### INTENDED STAKEHOLDERS

Inclusion assessments have been conducted since 12 years following grave disasters. Thereafter, the exercise continues to empower communities on their rights in disasters, and the method of securing them through concerted community-led engagements with the state, and sensitising the humanitarian agencies (funding, implementing, advising and research organisations) on making their needs analysis and responses SC/ST disaggregated relating to gender, disability and age.

The social barriers that thrust upon the SC, ST, OBC, and other minority communities are not unknown of, but the structural deficiency embedded in the SDRF Norms, results in default exclusion of a vast section of survivors from these entitlements albeit insufficient. The assessment proposes recommendations for concerted actions of the stakeholders, including the Government of Odisha, towards overcoming the social and systemic bottlenecks to inclusive and disaster resilient communities and nation.



Methodology: This was a purposive sample-based assessment of 7600 households of the SC, ST, OBC communities and vulnerable groups. The rationale for selecting these social groups was their socio-economic status based on human development indices. The enquiries were based on SDRF Norms; using the ODK Collect, an open-source Android app for data collection.



## **II. Summary of Damage and Losses**

0-25% 26-50% 51-75% 76-100% Count of total SC ST OBC General ΑII respondents Forly warning coards and recous death

	Early warning, search and rescue, death						
1	Did not receive timely early warning to shift to safer location	24	23	26	24	58	(n = 7,612)
2	Received but only within 48 hours	47	44	65	59	39	(n = 5,819)
3	Government did not arrange vehicle to take them out of village	91	89	100	97	96	(n = 7,612)
4	Government did not arrange vehicle to bring them back to village	33	32	75	71	100	(n = 696)
5	Did not shift to a relief camp during cyclone	56	51	86	59	75	(n = 7,612)
6	Did not shift to a relief camp due to fear of covid	70	69	82	44	44	(n = 7,612)
7	Did not shift to a relief camp for want of space	34	34	28	57	59	(n = 7,612)
8	Neither shifted nor received cash/rice assistance from government	69	62	97	63	78	(n = 4,236)
9	Death in the family due to the cyclone	0.1	1.1	1.1	0.0	1.1	(n = 7,612)
	Damage						
10	Damage to house	57	18	57	58	55	(n = 7,612)
11	House severely damaged or fully damaged	38	38	28	48	28	(n = 4,357)
12	Damage to cattle shed	28	31	3	38	21	(n = 7,612)
13	Damage to stored grains	23	26	3	22	20	(n = 7,612)
14	Reported agricultural losses	69	80	9	53	94	(n = 4,252)
15	Death of large milch animals	30	33	3	49	19	(n = 7,612)
16	Large milch animals lost as share of large animals possessed		11	0.3	17	10	(n = 7,612)
17	Small milch animals lost as share of small animals possessed		45	16	54	32	(n = 7,612)
18	Small non-dairy cattle lost as share of small non-dairy cattle possessed		2	0.5	0.5	24	(n = 7,612)
19	Poultry birds lost as share of poultry birds possessed		49	68	59	67	(n = 7,612)
20	Damage to boat	79					(n= 104)
21	Damage to fishing net	43					(n= 1,899)
22	Damaged to fish seed	93					(n = 428)
23	Artisan tools/lost damaged	35					(n= 104)

<sup>&</sup>lt;sup>1</sup> Odisha Economic Survey Report of 2018-19



## **III. Findings and Conclusions**

The fear of COVID-19 and lack of space was the primary reason that kept 70 per cent of the respondents away from relief camps. In some cases, respondents moved into schools for shelter where general community and OBCs were primary occupants. A significant proportion of the SC and ST respondents took refuge at someone's home or in community halls.

#### **DEATH AND INJURY:**

Overall, 7 deaths and 16 injuries were reported, of which 6 deaths and 15 injuries were reported by the SC community. The deaths and injuries in a disaster are closely linked to early warning, a community's ability to relocate, knowledge and access to evacuation routes and cyclone shelters. While the early warning reached all communities, special measures of preparedness, search and rescue in the SC and ST habitats are imperative while reinforcing the existing measures for communities living in disaster-prone areas.

#### **AGRICULTURE:**

While 60% of the households rely on agriculture, 54% of farming communities are sharecroppers. Despite the high land ownership among the general and OBC communities, agriculture is found to be the main vocation of the ST and SC communities. Over 80% households had taken loans from non-banking financial institutions and moneylenders for agriculture. Being landless sharecroppers, most respondents had no crop insurance to come to their aid. Furthermore, without land ownership, they remain ineligible for assistance that will then push them deeper into poverty and indebtedness.

#### LIVESTOCK:

A substantial proportion of households have lost livestock and poultry. A higher percentage of milch animals (pigs and goats) owned by the OBC and SC communities, were lost in the cyclone. The SC and ST communities also lost a large number of poultry birds. Notably, 60 per cent loss of poultry was reported by the households with elderly respondents, lactating women and pregnant women. This was a source of income that provided nutrition security at the household-level. The State Disaster Relief Force (SDRF) norms provide inadequate assistance and these norms should be revised to enable households to procure livestock without depending on loans.

#### FISHING:

Fishing is practiced for subsistence by the SCs and the OBCs. Notably, 71% of the SC households involved in fishing are informal; 95% do not own boats nor are they registered with the concerned authority. The same goes for 47% of the OBCs and 40% of the general communities, however, fishing is not a significant source of livelihood or subsistence for them. Since a majority of fish workers are unregistered, they are rendered ineligible for assistance under the SDRF norms or other schemes, exposing them to various forms of distress.

#### **HOUSING:**

Most respondents lived in kutcha houses that are inclined to collapse during a severe cyclonic storm. Over 50% of the ST respondents inhabited pucca houses and reported the lowest damages. Housing damages were reported extensively by the SC community (63%) followed by the OBC and general community. The SDRF extended monetary assistance against authorised housing, which was linked to the ownership of the land and deprived the landless of aid. Furthermore, the SDRF norms do not recognise the loss of stored food grains.



## IV. Recommendations

The National/State Disaster Relief Norms are the minimum standard of relief to be available to people affected by disasters. However, many states, including the Government of Odisha have in the past delivered beyond the prescribed norms to make this assistance more meaningful to the people. This precedent has encouraged the following recommendations, which requires a holistic and inter-ministerial/departmental convergence in planning, programming and budgeting.

#### **EARLY WARNING; DEATH & INJURY**

- 1. Implement new safety and preparedness measures towards better search and rescue, and first-aid in disaster-prone areas. Existing systems need to be strengthened too for the vulnerable communities.
- 2. The village disaster management committees under the guidance of the district disaster management committees should conduct mock-drills in these areas.
- 3. Prepare a local plan of facilities, pre-designated shelters and the means of transport to shift vulnerable communities to safety.

#### **AGRICULTURE**

- The SDRF norms should provide financial assistance to the landless sharecroppers who have lost the standing crops, unrestricted by 33% crop loss ceiling for assistance.
- 2. The Government of Odisha provided credit to landless workers and sharecroppers under the Balaram scheme. With the Department of Revenue as the nodal agency on land matters and disaster management, the government should converge these measures so that the agricultural

loss of sharecroppers is recognised and compensated.

3. Landless labourers should be given wage-loss compensation equal to the highest minimum wage for agricultural until they are unable to find labour.

#### **LIVESTOCK**

1. The gratuitous relief being provided for animals is Rs. 30,000 for a cow or buffalo, Rs. 25,000 for a bullock, Rs. 3,000 for a goat, and Rs. 50 per bird for poultry (up to Rs 5000). The assistance has to be based on the current market value of these livestock to support faster recovery.

#### **FISHING**

 It is imperative that the scope of the SDRF norms is expanded and/or additional policy, legislative and budgetary provisions are initiated to provide financial assistance to the unregistered and informal fish workers in disasters.

#### HOUSING

- 1. The SDRF norms must recognise and provide assistance for housing damages on public land or land without a title of ownership with the residents. This could be done by securing an undertaking from the panchayat head as proof of residence to release. Additionally, this could be converged with the Rural Housing (Away Yojana) scheme, and land allotment and titles under state's scheme for the landless.
- 2. Social protection schemes should be leveraged to provide ex-gratia relief for at least a period of six months until the survivors are able to recuperate, thereby reducing the probability of falling prey to succeeding risks and distress.

### **General Recommendations for the Government and Disaster Management Bodies**

- 1. Mandatorily collect SC/ST disaggregated data and analysis when undertaking the needs assessment and damage and loss assessment exercises.
- 2. Compulsorily ask for disaggregated findings from non-government entities to identify needs and priorities for short, medium and long-term recovery investment plans.
- 3. Mainstream disaster resilience and climate adaptation programmes in Scheduled Caste Sub Plan and Tribal Sub-Plans; State's Welfare budget for the SC, ST, OBC and Minorities; gender and social sector budgeting,
- 4. Timebound action plan for disaster resilience and climate adaptation programmes in Scheduled Caste Sub Plan and Tribal Sub-Plans; State's Welfare budget for the SC, ST, OBC and Minorities.

## General Recommendations for the Humanitarian Agencies and Stakeholders, including the CSR and Philanthropies, the UN, and EU institutions:

- 1. Proactively seek for SC/ST/Gender/PwD disaggregated findings from non-government entities to identify needs and priorities for short, medium and long-term investments.
- 2. Invest in capacity building on social inclusion for humanitarian personnel across all levels of operations as an annual exercise.
- 3. Adopt social equity auditing to assess the impact of humanitarian programmes, and to ascertain return on investments as part of internal monitoring and evaluations.
- 4. Diversify organisational boards to represent SC/ST community, persons with disabilities, and non-binary groups through proactive measures.



## 1. Survey Demographics

	All	SC	ST	OBC	General
Total respondents	7,612	6,330	948	243	91
		Share	of respond	ents (%)	
By occupation		Onare	от гезропа	(70)	
Farming	60.21	57.39	72.89	77.78	76.92
Fishing	22.02	25.86	0.11	13.17	6.59
Registered self-employed	1.43	1.48	1.27	1.23	0.00
Unregistered self-employed	5.65	6.40	1.58	3.70	1.10
migrant worker	5.39	6.19	0.84	2.06	5.49
salaried	1.10	1.23	0.42	0.41	1.10
other	22.83	16.27	40.72	13.17	18.68
			,		
By monthly income					
Less than Rs 5,000	72.69	71.26	83.97	60.91	85.71
Rs 5,001 to Rs 10,000	26.13	27.52	14.77	39.09	13.19
Above Rs 10,000	1.18	1.22	1.27	0.00	1.10
Migrant family	5.82	6.60	1.48	3.29	3.30
Having children below 6 years	28.77	27.82	35.34	30.86	20.88
Having children between 7 and 18 years	47.73	46.41	56.96	44.03	52.75
Children with disability	3.05	2.95	3.46	2.05	7.02
Elderly population	25.89	25.29	29.85	27.98	20.88
Household with pregnant woman	1.97	1.80	3.59	0.82	0.00
Household with lactating woman	10.61	9.79	16.98	10.29	2.20



## 2. Early Warning, Search and Rescue

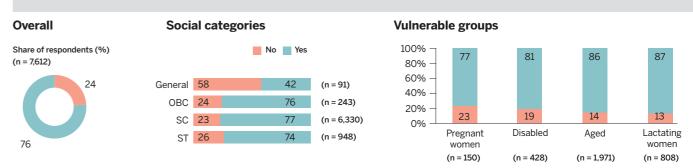
About 76% of respondents said that they received sufficient warning. Overall, 21-27% target population received early warning more than 72 hours later. Among the marginalised communities, 31% STs and 26% OBCs received information within 24 hours of landfall. Further, most respondents relied on the government for early warning, followed by TV channels.

Overall, 56% of the population did not shift to relief camps during the cyclone, the highest being from ST (86%) followed by the General community (75%), the OBC (59%) and SC (51%) community. Of them, only 31% received cash assistance for families not housed in the relief camps. These households

comprised significant population of vulnerable groups. While for a majority the relief camps were located within 1km from their habitats, 15% of SC and ST households, and 25% of OBCs had them at a greater distance of 2kms. Overall, 70% of respondents said that the fear of COVID-19 deterred them from going to the relief camps, followed by 34% who did not find enough space for accommodation. However, those who did not move to relief camps took shelter in schools, of which were predominantly the general communities (63.3%) followed by the OBC (48.6%), SC (45.4%), and STs (25.4%). 63.2% of the STs made their own alternative arrangements followed by the OBC (40.3%) and SC (29%).

#### Share of respondents (%)

#### (a) Did you receive timely early warning to shift to safer location?

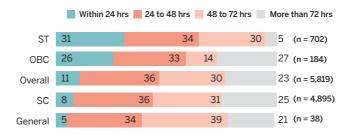


Social categories arranged in descending order of response 'No'.

#### HHs with vulnerable groups arranged in descending order of response 'No'.

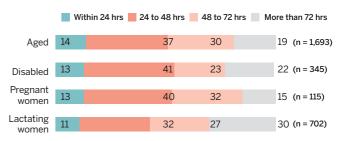
#### (b) If yes, when?

#### Social categories



Social categories arranged in descending order of response to 'within 24 hours'.

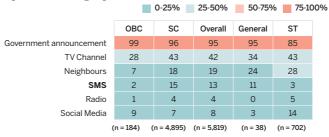
#### Vulnerable groups



HHs with vulnerable groups arranged in descending order of response to 'within 24 hours'

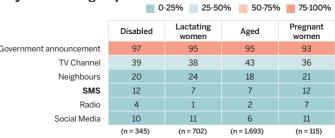
#### (c) By whom?

### By social category



Social categories arranged in descending order of response to 'government'

#### By vulnerable groups



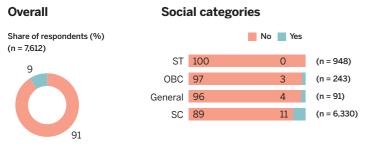
HHs with vulnerable groups arranged in descending order of response to 'government announcement'.



## 2. Early Warning, Search and Rescue

Share of respondents (%)

#### (d) Did the government arrange a vehicle to take you out of the village?



Social categories arranged in descending order of response 'No'.

#### **Vulnerable groups** 100% 80% 60% 40% 20% Lactating Disabled Pregnant Aged women (n = 808)(n = 1,971)(n = 428)

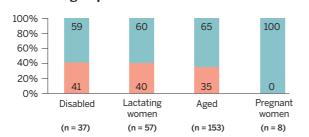
HHs with vulnerable groups arranged in descending order of response 'No'.

#### (e) Did the government arrange vehicle to bring you back to the village?

#### Social categories Overall Share of respondents (%) (n = 696)General 100 ST 75 (n = 4)OBC 71 (n = 7)(n = 681)

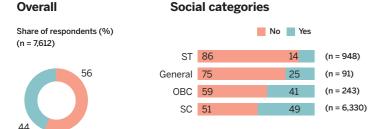
Social categories arranged in descending order of response 'No'.

### **Vulnerable groups**



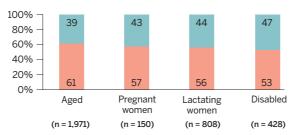
HHs with vulnerable groups arranged in descending order of response 'No'.

#### (f) Did you shift to a relief camp during the cyclone?



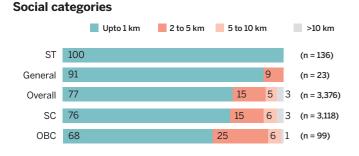
Social categories arranged in descending order of response 'No'.

#### **Vulnerable groups**



HHs with vulnerable groups arranged in descending order of response 'No'.

#### (g) If yes, how far was the shelter from your village?



Social categories arranged in descending order of response to 'within 1 km'.

**Vulnerable groups** 



HHs with vulnerable groups arranged in descending order of response to 'within 1 km'.

## 2. Early Warning, Search and Rescue

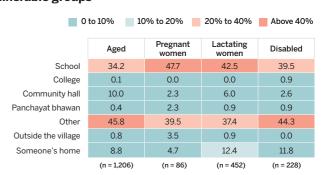
Share of respondents (%)

#### (h) If no, where did you move with your family in the village?

#### Social category

1	0 to 10%	10% to	20% 20	% to 40%	0% Above 40%	
	General	OBC	SC	ST	Overall	
School	63.2	48.6	45.4	25.4	41.9	
College	1.5	0.7	0.3	0.0	0.3	
Community hall	11.8	4.9	12.5	0.1	9.9	
Panchayat bhawan	0.0	0.0	1.1	0.6	0.9	
Other	13.2	40.3	29.0	63.2	36.0	
Outside the village	0.0	0.0	8.0	1.0	0.8	
Someone's home	10.3	5.6	10.8	8.3	10.2	
	(n = 68)	(n = 144)	(n = 3,212)	(n = 812)	(n = 4,236)	

#### **Vulnerable groups**



#### (i) Why did you not move to a relief camp?

#### Social category

	Fear of covid		Not enough space		Not allowed	
General		44		59	1	(n = 68)
OBC		44		57	1	(n = 144)
SC		69		34	3	(n = 3,212)
ST		82		28	5	(n = 812)
Overall		70		34	3	(n = 4,236)

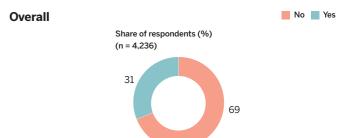
#### **Vulnerable groups**

	Fear of covid		Not enough space		Not allowed	
Aged		71		33	2	(n = 1,206)
Pregnant women		62		50	1	(n = 86)
Lactating women		66		42	4	(n = 452)
Disabled		69		36	4	(n = 228)

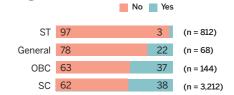
#### Vulnerable groups by social category

	Fear of covid		Not enough space		gh	Not allowed			
Aged									
General		30					70	0	(n = 10)
OBC		Ę	50			47	7	3	(n = 38)
SC			69		35	5		2	(n = 920)
ST			87		23			3	(n = 238)
Pregnant women									
OBC		Ę	50				50	0	(n = 2)
SC		4	6	61		61	0	(n = 54)	
ST			90	30		30	3	(n = 30)	
Lactating women									
General			0			1	.00	0	(n = 1)
OBC	18	3		82		82	0	(n = 11)	
SC			63	44			4	(n = 304)	
ST			76		34			7	(n = 136)
Disabled									
General	100					0	0	(n = 5)	
OBC	63			3	8		0	(n = 8)	
SC			64		3	9		5	(n = 148)
ST			81		31			3	(n = 67)

#### (j) If no, did you receive Government cash assistance of Rs 60 per adult and Rs 45 per child, or rice?

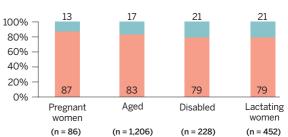


#### Social categories



Social categories arranged in descending order of response 'No'.

#### **Vulnerable groups**



HHs with vulnerable groups arranged in descending order of response 'No'.



## 3. Death and Injury

Of the total fatalities, 6 deaths were reported by the SC community and 1 by General community in Bhadrak district. Of the total cases of injuries, the SCs reported 8 cases in Balasore and 7 in Bhadrak, followed by a case reported by the ST respondent in Mayurbhanj. Among the dead and injured were the aged, persons with disabilities, pregnant and lactating women, and the under-5-year-old children. This finding speaks volumes about the physical vulnerabilities of each of these groups along with their social location.

#### Share of respondents (%)

#### (a) Has anyone died in the family due to the cyclone?

#### Overall Social categories Share of respondents (%) (n = 7,612)General 1.1 (n = 91)SC 1.1 (n = 6,330) (n = 243)OBC

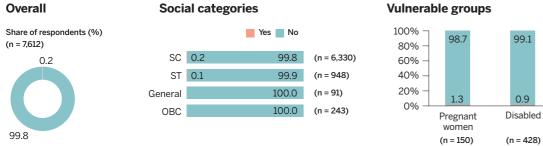
100% 80% 60% 40% 20% 0% Aged Disabled Pregnant Lactating (n = 1,971)(n = 428)(n = 150)(n = 808)

**Vulnerable groups** 

Social categories arranged in descending order of response 'Yes'.

#### HHs with vulnerable groups arranged in descending order of response 'Yes'.

#### (b) Has anyone been seriously injured in a cyclone?



Social categories arranged in descending order of response 'Yes'.

## Lactating Aged

HHs with vulnerable groups arranged in descending order of response 'Yes'.

(n = 1.971)

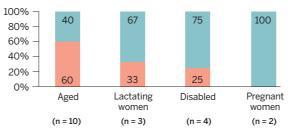
(n = 808)

#### (c) In case of a serious injury, if limbs are fractured/ eye injury/ spinal cord injury or damage resulting in disability?



No one among general and OBC suffered a serious injury. Social categories arranged in descending order of injury count.

## Vulnerable groups



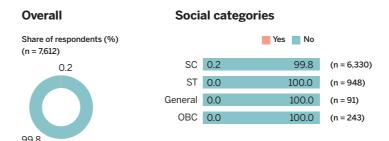
HHs with vulnerable groups arranged in descending order of injury count.

# Damage and Losses

## 3. Death and Injury

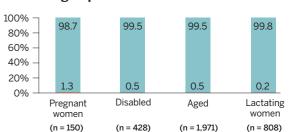
#### Share of respondents (%)

#### (d) Has anyone been hospitalised due to injury in cyclone?



Social categories arranged in descending order of response 'Yes'.

#### **Vulnerable groups**



HHs with vulnerable groups arranged in descending order of response 'Yes'.

## 4. Agriculture

Of the total respondents, 60 per cent were involved in agriculture as the main means of livelihood, also housing 61 per cent to 66 per cent of the vulnerable groups. However, 54 per cent of the respondents did not own the land, with 98% of them cultivating less than 2 hectares of sharecropped land. The inter-community analysis shows greater dependence of the STs (74% in Mayurbhani) and SCs (59%) on agriculture followed by the OBC (57%) and general community (47%). This is despite the fact that a majority of the general (72%) and OBC communities (68%) are landowners.

Majority of the respondents across communities (90%) did not have crop insurance - the community-wise break up shows that 95 per cent respondents from the ST community, 94 per cent from the OBC community, 89 per cent SCs, and 84 per cent General community respondents did not have crop insurance. The data reveal that over 80 per cent of the households had ongoing agricultural loans when the cyclone struck, with 45 per cent of them having a loan varying from Rs. 25,000 to Rs. 1 lakh and above. A bulk of crop loss being 'less than 33 per cent' for a vast section of small and marginal, and landless farmers, who have varying sizes of ongoing loans.

#### Share of respondents (%)

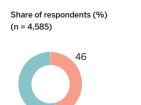
#### (a) Do you farm?

#### **Vulnerable groups** Social categories Overall 100% No Yes Share of respondents (%) (n = 7,612)80% ST 74 26 (n = 948) 60% SC 59 40% 20% OBC 57 (n = 243)0% General 47 (n = 91)Lactating Pregnant Aged Disabled (n = 1.971)(n = 150)(n = 808)(n = 428)

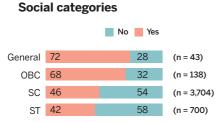
Social categories arranged in descending order of those who replied 'Yes'.

#### HHs with vulnerable groups arranged in descending order of response 'Yes'.

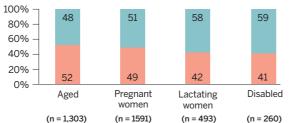
#### (b) Do you own the farmed land?



Overall



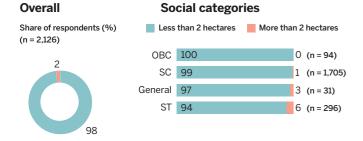
## **Vulnerable groups**



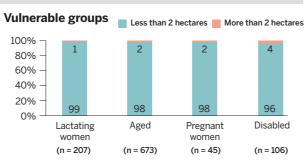
Social categories arranged in descending order of those who replied 'ves'.

HHs with vulnerable groups arranged in descending order of response 'Yes.

#### (c) How much land do you own?



Social categories arranged in descending order of responses for 'less than 2 hectares'.



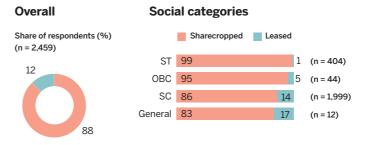
#### HHs with vulnerable groups arranged in descending order of responses for

# Damage and Losses

## 4. Agriculture

#### Share of respondents (%)

#### (d) If 'no', is it is leased/sharecropped land?



Social categories arranged in descending order of responses for 'sharecropped'.



HHs with vulnerable groups arranged in descending order of responses for

#### (e) Was your agricultural crop damaged?

#### Social categories More than Less than Silt deposit No crop damage 33% crop loss 33% crop loss Overall 4 31 (n = 2,126) 20 (n = 1,705) SC 4 75 0.2 6 (n = 31) General 47 (n = 94) OBC ST 1 92 (n = 296)

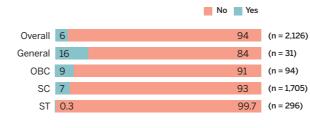
Social categories arranged in descending order of response to 'more than 33% crop loss'.

#### **Vulnerable groups** More than Less than Silt deposit No crop damage 33% cron loss 33% cron loss (n = 45) Pregnant Disabled (n = 106)(n = 673)Aged Lactating 38 (n = 207)

HHs with vulnerable groups arranged in descending order of response to 'more than 33% crop loss.

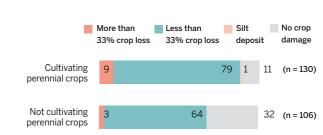
#### (f) Do you cultivate perennial crops?

#### Social categories



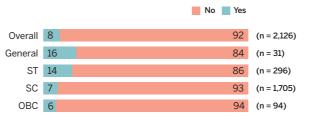
Social categories arranged in descending order of those who replied 'yes'.

#### Damage to crops



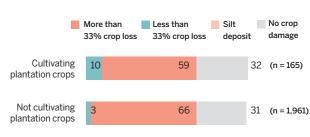
#### (g) Do you cultivate annual plantations crops?

#### Social categories



Social categories arranged in descending order of those who replied 'yes'.

#### Damage to crops





## 4. Agriculture

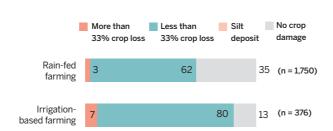
#### (h) What is the source of water for your farms?

#### No Yes 18 (n = 2,126) Overall 82 OBC 96 (n = 94)(n = 296) ST 92 SC 80 20 (n = 1,705) General 68 32 (n = 31)

Social categories arranged in descending order of those who replied 'rains'.

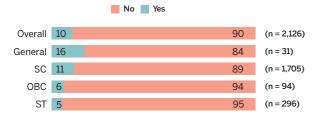
Social categories

#### Damage to crops



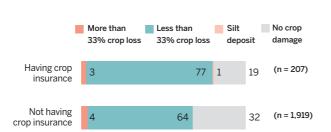
(i) Do you have crop insurance?

Social categories

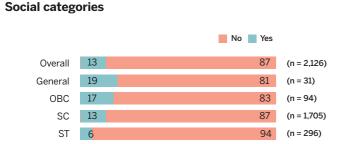


Social categories arranged in descending order of those who replied 'yes'.

### Damage to crops



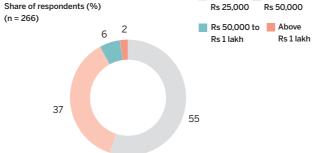
#### (j) Do you have any Agricultural Loan?



Social categories arranged in descending order of those who replied 'yes'.

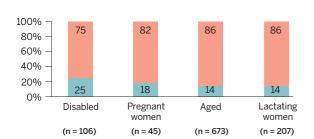
## (n = 266)

Size of loan

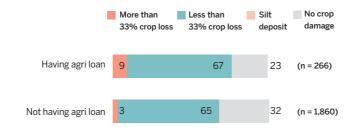


Rs 25,000 to

**Vulnerable groups** 



#### Damage to crops



HHs with vulnerable groups arranged in descending order of response 'yes'.



## **5. Animal Husbandry and Poultry**

Only a small percentage of responders from across the communities possessed large milch animals, such as cows and buffaloes. However, a higher percentage of OBC (17.4%) reported loss of large milch animals, and a significant percentage of small milch animals, consisting of goats and pigs were lost by the OBC (54.3%), followed by the SC respondents (45%). The livestock losses were comparatively lowest among the STs and few general community households appear to have owned small milch

animals. The losses have been significant to those who reared poultry too – 68 per cent losses were reported by the ST community that had 1,395 birds before the cyclone, even more alarming was the 49 per cent loss reported by the SC community, who reportedly owned 84,938 birds before the

#### (a) Death of large milch animals

#### Social categories

	Larg	ge animals lost as share of large animals possessed (%)	Number of large animals possessed before cyclone		
OBC		17.4	121		
SC		10.7	5,848		
General		10.2	49		
ST	0.3		359		

#### **Vulnerable groups**

	Lar	-	lost as share of large possessed (%)	Number of large animals possessed before cyclone
Pregnant women			98.9	91
Lactating women			40.6	495
Disabled		11.4		413
Aged	0.7	7		3,160

#### (b) Death of small milch animals

#### Social categories

	Small animals lost as share of small animals possessed (%)			Number of small animals possessed before cyclone
OBC			54.3	208
sc			45.0	10,901
General		32.4	4	71
ST	15	.5		548

#### Vulnerable groups

	Small animals los small animals po		Number of small animals possessed before cyclone
Lactating women		91.0	3,581
Pregnant women		65.0	163
Disabled		58.9	350
Aged		53.2	1,373

#### (c) Death of small non-dairy cattle

#### Social categories

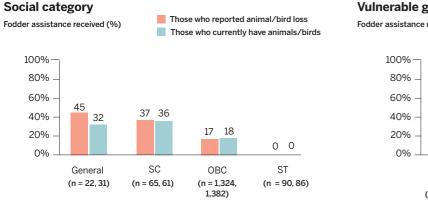
		on-dairy cattle lost as share of on-dairy cattle possessed (%)	Number of small non-dairy cattle possessed before cyclone		
General		23.9	71		
SC	1.6		10,901		
ST	0.5		548		
OBC	0.5		208		

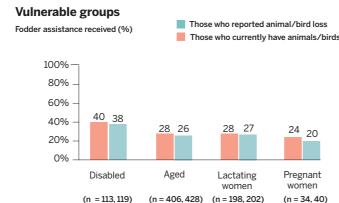
#### Vulnerable groups

	Small non-dairy cattle lost as share of small non-dairy cattle possessed (%)	Number of small non-dairy cattle possessed before cyclone
Aged	5.2	1,373
Pregnant women	2.5	163
Disabled	2.3	350
Lactating women	0.7	3,581

## 5. Animal Husbandry and Poultry

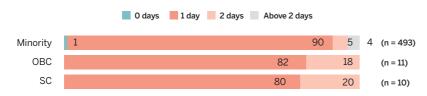
#### (d) Whether fodder assistance received?





#### (e) How many days did you receive fodder?

#### By social category



There were no ST respondents to this question

Social categories arranged in descending order of response to '1 day'.

#### (f) Death of poultry birds

#### Social categories

	Poultry birds lost as share of poultry birds possessed (%)		Number of poultry birds possessed before cyclone
ST		68	1,395
General		67	124
ОВС		59	716
sc	4	9	84,938

#### **Vulnerable groups**

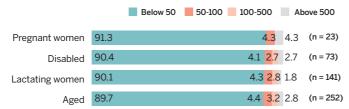
			as share of sessed (%)	Number of poultry birds possessed before cyclone
Aged		60		18,531
Lactating women		32		43,812
Pregnant women		30		4,521
Disabled 13				27,081

#### (g) Number of poultry birds lost

#### Social category Share of respondents by number of birds lost (%) Below 50 50-100 100-500 Above 500 General 100 (n = 10)3 2 (n = 58) 42 2 (n = 812)

#### Share of respondents by number of birds lost (%)

**Vulnerable groups** 



Social categories arranged in descending order of response to 'below 50 birds'.

HHs with vulnerable groups arranged in descending order of response to 'below 50

# Damage and Losses

## 6. Fishing details

Only 25 per cent of all the respondents were involved in fishing as a means of livelihood and this was most common among the SC community with 29 per cent respondents. These 25 per cent of the households shelter over 80 per cent of the vulnerable groups. Nevertheless, it is important to note that nearly 71 per cent of the respondents involved in fishing were not registered and 95 per cent did not own a boat. The community-wise analysis shows that 71 per cent of the SC community were not registered alongside 47 per cent of the OBCs and 40 per cent of the general community. Among those who owned boats, 79 per cent reported damage to (small) boat and 43 per cent

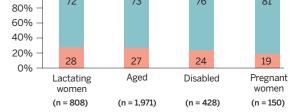
reported damage to fishing nets. Of those who reported massive damage of fishing nets are the SCs (56%). 70 per cent OBCs, 60 per cent of the general community, and 22 per cent of the SC community owned fish farms that were damaged – and for a majority (67%) the size of the farm was less than 2 acres.

#### Share of respondents (%)

#### (a) Do you do fishing?

Overall	Socia	Vulnerable group					
Share of respondents (%) (n = 7,612)			No Yes		100% – 80% – 60% –	72	
25	SC	29	71	(n = 6,330)	40% -		
	OBC		88	(n = 243)	20% -	28	
75	General ST	0	100	(n = 91) (n = 948)	0% —	Lactatir womer	_
						/ non	

Social categories arranged in descending order of count of those who said 'yes'



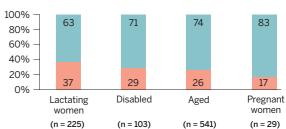
HHs with vulnerable groups arranged in descending order of response 'yes'.

#### (b) If yes, are you registered?

#### Overall Social categories Share of respondents (%) (n = 1,899)OBC 53 General 40 (n = 1.858)ST 0 (n = 1)

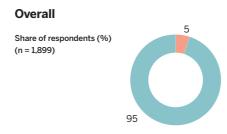
Social categories arranged in descending order of count of those who said 'yes'

### **Vulnerable groups**

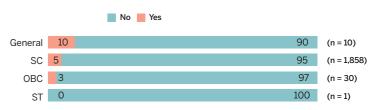


HHs with vulnerable groups arranged in descending order of response 'yes'.

#### (c) Do you own a boat?



#### Social categories



Social categories arranged in descending order of count of those who said 'yes'

SC

(n = 29)



## **6. Fishing details**

Share of respondents (%)

#### (d) Damage to boat

#### Do you own a small or big boat?

Share of respondents (%) (n = 104)

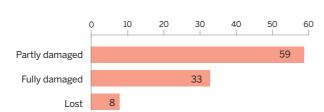


#### Was your boat damaged? Share of respondents (%)

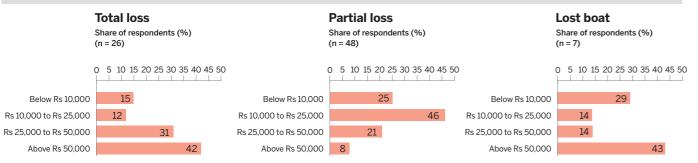


#### What was the scale of damage?

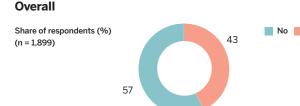
Share of respondents (%) (n = 82)



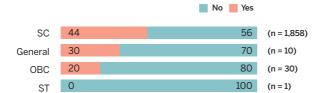
#### (e) What was the extent of loss related to the boat?



#### (f) Was your fishing net damaged?

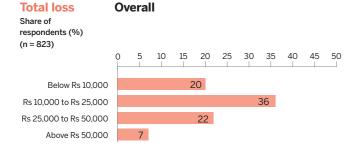


#### Social categories



Social categories arranged in descending order of count of those who said 'yes'.

#### (g) What was the extent of loss related to the fishing net: total loss?



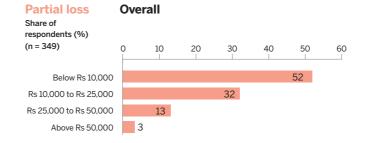
#### **Vulnerable groups**

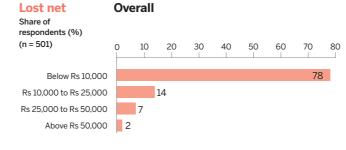
	Below Rs 10,000	Rs 10,000 to Rs 25,000	Rs 25,000 to Rs 50,000	Above Rs 50,000	
Aged	93	6	1	0	(n = 168)
Pregnant women	82	18	0	0	(n = 11)
Lactating women	91	5	4	0	(n = 74)
Disabled	98	2	0	0	(n = 53)

# Damage and Losses

## **6. Fishing details**

#### (h) What was the extent of loss related to the fishing net: partial loss, lost net?





#### **Vulnerable groups**

	Below Rs 10,000	Rs 10,000 to Rs 25,000	Rs 25,000 to Rs 50,000	Above Rs 50,000	
Aged	54	40	5	1	(n = 118)
Pregnant women	29	43	29	0	(n = 7)
Lactating women	63	31	6	0	(n = 32)
Disabled	50	35	5	10	(n = 20)

#### **Vulnerable groups**

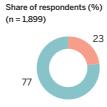
	Below Rs 10,000	Rs 10,000 to Rs 25,000	Rs 25,000 to Rs 50,000	Above Rs 50,000	
Aged	93	6	1	0	(n = 168)
Pregnant women	82	18	0	0	(n = 11)
Lactating women	91	5	4	0	(n = 74)
Disabled	98	2	0	0	(n = 53)

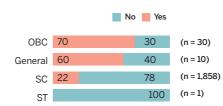
Less than 2 acres

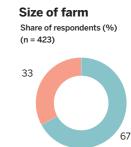
2 acres or more

#### (i) Do you own a fish farm?

#### Social categories Overall

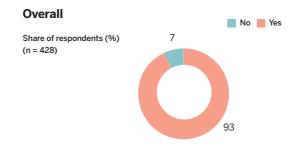




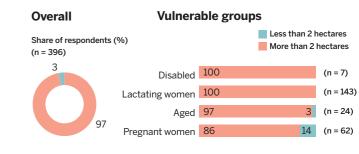


Social categories arranged in descending order of count of those who said 'yes'.

#### (j) Is the fish seed damaged/lost due to cyclone?



#### (k) How many hectares have been damaged?



Social categories arranged in descending order of exclusion.

### 7. Handicrafts

Almost 99 per cent of the respondents from the surveyed districts said that they were not artisans, weavers or involved in the handicrafts. Although only 1.4 per cent of the households pursue handicrafts as means of livelihood, a significant proportion of vulnerable groups are housed in them. 35% reported that their tools had been damaged or lost due to the cyclone.

#### Share of respondents (%)

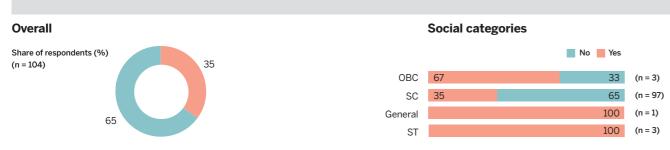
#### (a) Are you an artisan or weaver?

#### Social categories **Vulnerable groups** Overall 100% Share of respondents (%) (n = 7,612) 80% (n = 6.330)60% OBC 1.2 (n = 243)40% 20% General 1.1 0% ST 0.3 Aged Lactating Pregnant Disabled (n = 1,971)(n = 428) (n = 808)(n = 150)

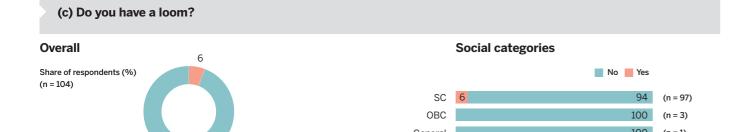
Social categories arranged in descending order of count of those who said 'yes'.

HHs with vulnerable groups arranged in descending order of response 'yes'.

#### (b) Are your tools lost/damaged by the cyclone?



Social categories arranged in descending order of count of those who said 'yes'.



Social categories arranged in descending order of count of those who said 'yes'.

# Damage and Losses

## 8. Damage to House

Overall, 74% of the respondents across communities said that they owned the house as well as the homestead land, while a small but significant percentage denied the ownership of land on which they reside. Several respondents across all social categories and vulnerable groups reported that their homes have been damaged in the cyclone. This includes 63.1 per cent of the SC community followed by the OBC, general and ST communities. Over 50 per cent of the vulnerable groups were living in these households. Further analysis shows that a bulk of respondents were living in kutcha houses, with 51.4% of the ST community inhabiting pucca houses in Mayurbhanj. Nearly 37 per cent

of the OBC community and 23 per cent of the SC reported fully damaged houses with partial damages reported widely across the communities. Overall, 22 per cent respondents incurred fiscal losses up to Rs. 25,000, and 19 per cent suffered losses up to Rs. 50,000. In some cases (28%) the cattle shed was damaged along with their homes, and so were the stored grain (82%) ranging from 1 to 10 quintals and above. The households facing loss of stored food grains shelter over 80 per cent of the vulnerable population.

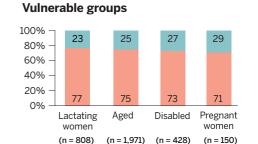
#### Share of respondents (%)

#### (a) Do you own a house, including land?

# Overall Share of respondents (%) Yes No (n = 7,612) 26 SC 75 25 (n = 6,330) ST 71 29 (n = 948) OBC 60 40 (n = 243)

Social categories arranged in descending order of count of those who said 'yes'.

59 (n = 91)

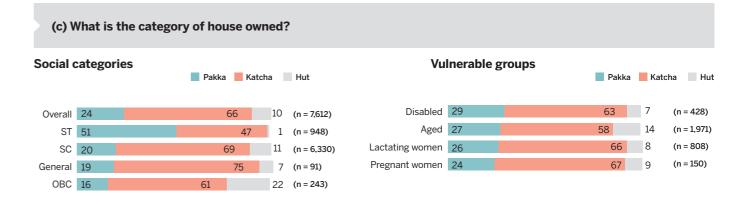


Vulnerable groups arranged in descending order of those who said 'yes'.

#### (b) Type of landholding?



Social categories arranged in descending order of respondents living on government land.



Social categories arranged in descending order of response to 'pakka

Vulnerable groups arranged in descending order of response to 'pakka'.

## 8. Damage to House

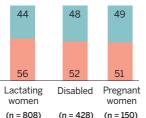
#### Share of respondents (%)

#### (c) Has your house been damaged in the cyclone?

#### Social categories 100% 80% Overall 57 (n = 7.612) 60% SC 63 (n = 6,330) 40% 20% OBC 58 42 (n = 243) 0% 45 (n = 91)General 55 Lactating Aged ST 18 82 (n = 948)

Social categories arranged in descending order of count of those who said 'yes'.

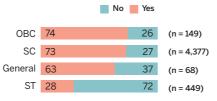
## **Vulnerable groups**



Vulnerable groups arranged in descending order of those who said 'yes'.

(n = 1.971)

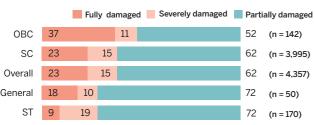
#### Living in katcha houses and incurring house damage



Arranged in descending order of those who said 'yes'.

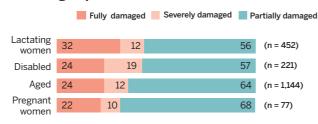
#### (d) What was the extent of damage?

#### Social category



Social categories arranged in descending order of response to 'fully damaged

#### **Vulnerable groups**

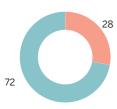


Vulnerable groups arranged in descending order of response to 'fully damaged'.

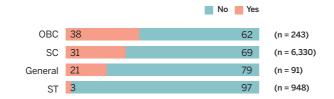
#### (e) Whether cattle shed is damaged with the residential house?

#### Overall

Share of respondents (%) (n = 7.612)



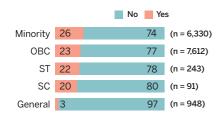
#### Social categories



Social categories arranged in descending order of count of those who said 'ves

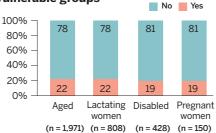
#### (f) Whether stored grains are damaged?

#### Social categories

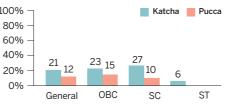


Social categories arranged in descending order of count of those who said 'yes'.

#### **Vulnerable groups**



100%



Grain damage by type of house

Vulnerable groups arranged in descending

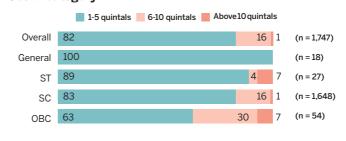
# Damage and Losses

## 8. Damage to House

Share of respondents (%)

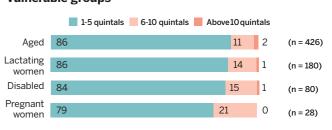
#### (g) What quantity of grains are damaged?

### Social category



Social categories arranged in descending order of response to '1-5 quintals'.

#### **Vulnerable groups**



Vulnerable groups arranged in descending order of response to '1-5 quintals'.

#### (h) What was the total cost of the loss?

#### Social category



Social categories arranged in descending order of response to 'below Rs 25,000'.

#### **Vulnerable groups**



Vulnerable groups arranged in descending order of response to 'below Rs 25,000'.

#### **Credits**

#### October 2021

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Design: How India Lives (www.howindialives.com)

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Cyclone Yaas, Odisha: Social Inclusion in the Assessment of Damages and Losses



## About Us

Sphere India
National Coalition of Humanitarian Agencies in India

**Sphere India** is a National Coalition of Humanitarian Agencies in India. The membership of 96 organisations, 26

State Inter Agency Groups and 12 individuals include key nodal organizations from UN, INGOs, NGO Networks, National NGOs, CSR, Academic Institutions in India. In addition to this, 805 local organizations mapped for varied capacities all over India are associate members of Sphere India. Sphere India facilitates Inter Agency Coordination, Collaborative Advocacy and Capacity and Knowledge Sharing through a collaborative process for Accountability to Affected and at-risk Population in India.

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National Campaign on Dalit Human Rights (NCDHR), is a coalition of Dalit and Adivasi human rights activists and academics, founded in 1998, with the vision to promote social equity and inclusion for marginalised communities, particularly the Scheduled Castes and the Schedule Tribes to access their Constitutional rights, justice system,

and development and humanitarian entitlements. The NCDHR engages on gender justice; economic and humanitarian rights; and legal justice, respectively, committed to the international standards on human rights and disaster risk reduction through a dedicated humanitarian unit National Dalit Watch. NCDHR is a member of Sphere India network, and Executive Vice Chair, leading also the thematic task group on Protection of socially marginalised and vulnerable groups.

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www.ncdhr.org.in f https://www.facebook.com/NCDHR/

https://mobile.twitter.com/dalitrights



**Ambedkar Lohia Vichar Manch (ALVM)** was conceptualized to establish an egalitarian society and to fight for the rights of the Scheduled Castes, Scheduled Tribes, Minorities and all deprived sections along the ideologies of Dr. B. R. Ambedkar and Dr. Ram Manohar Lohia. ALVM was the first organization in Odisha to start fact

finding on cases of atrocities and follow up with necessary measures for justice to the victim. It also pioneered in educating people on SC & ST (POA) Act and Rules by organizing awareness programs and providing them the copy of the Act and Rules printed by the organization in Odia language. It started cadre building and training of Dalit Human Rights Defenders from 1999. It played a major role during the Swadhikar Rally in 2004 organised by NCDHR. As a member of the coalition, it organized different programs on PoA Act amendment and Tribal Sub-Plan and SC Sub-Plan legislation. In the recent years, responding to growing vulnerabilities, ALVM ventured into the fields of Child Rights and Inclusive Disaster Management.

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