

Flood Update IV from *Water Initiatives Odisha*

13th September 2011

Dear co-sailors,

As we bring to you the Flood Update IV for the current flood situations in the state of Odisha, we are overwhelmed by the tremendous response from our readers. Many have called us with news from their places and some have asked us to bring out print version of this update. We thank you all for this and we are sure together we can make it a regular and happening activity. As we have already said, WIO is an informal network whose strength depends on its members and well-wishers. ***Also, for your information, this is a PURELY VOLUNTARY EFFORT by us and we have not received any funding support from any one to bring out these updates to you.***

In the meanwhile friends from Australia and few groups of Delhi have contacted us to given information on groups that are engaged in flood relief and rehabilitation works so that they can chip in with some supports they can. We have already sent these requests to all in the state in our list. However, through this Update, we would once again request our readers in the state to get back to us on this so that we can pass on their details and contacts to those friends for them to contact you directly.

By the time we compile this Update, sources inform that the current flood has affected at least 2.2 million people in 3505 villages of 93 blocks and 14 urban areas of 19 districts in the state. At least 17 people are reported to be dead and 11 have been swept away by flood waters and hence are missing. Govt. reports say that 14 domestic animals have died and 2 elephants have been swept away by flood waters to a distance of about 5 kilometres and are waiting rescue. Two persons have died of snake bite and many are stuck up in swampy embankments and mounts without any safe drinking water and any other facilities. Many have started to fear of disease outbreaks. 4 helicopters are airdropping food packets for flood victims of Kendrapada, Puri and Jagatsinghpur districts and 911 boats have been engaged in the relief operations. In addition, several voluntary organisations and political parties are also engaged in flood relief activities.

Today, in our LEAD section we pick a news story from Dharitri to inform you, once again, how the mismanagement of Hirakud dam has actually fuelled the flood devastations in Mahanadi basin. In fact, ever since we raised this issue, many people in the state have echoed this and we are really happy to report to you that many civil society organisations, media, political parties, experts and academicians have now started to debate on this much critical issue. ***This is really a good thing to happen to this state as the management of Hirakud needs an overhauling with a change in the 'Rule Curve' and integrating several other factors those we have been raising. Hope the government listens now!***

As already informed, we are deliberately keeping the format of this update very simple and user friendly. In this update we have the following sections. After giving our *view point* in the LEAD Section, in the LOOKING BACK section, we take you back to one of our Alerts in 2009 that narrates how our warnings about climate change was confirmed by the World Bank. This Alert also has some relevant information on the Floods in the state. It confirms therefore that despite engaging with these international financial institutions and spending so much money and manpower in studies and researches, the learnings are not being integrated into the flood projection systems and management operations.

Then we hand pick some NEWS from different sources with the objective of giving you a latest picture of the flood, its impact and relief-rehabilitation measures on way in the state, both by government and other agencies. We then provide you with small important statistics in our STATS section that are useful in assessing the current situation of reservoirs, rainfall, etc. Finally, in the MET SPEAKS section, we highlight some of the key weather forecasts that may affect the flood conditions and relief-rehabilitation operations.

Once again, we would like to inform you that, at the moment, it's occasional and we may come up with these updates as and when we can, given our limited manpower and resources. However, with your inputs and support, we are sure; we shall be able to ensure regular flow of this update.

We request you to send in your reports of activities, your views; and any other interesting and relevant article, books, photographs, and anything that you feel we should cover in this Update. It's YOU who is the most important FUEL of this effort.

Before we stop to pen, we would like to inform you that this update is also available at

Look forward to listen from you and your continued support.

Thanks and regards,

Ranjan Panda

Convenor, Water Initiatives Odisha

STOP PRESS: *At 09.00 hrs on 13.09.2011, Reservoir Level of Hirakud was 628.71 and 5 Sluice Gates were open. 1,77,865 cusecs was inflow and 1,07,983 cusecs was the outflow.*

LEAD

Common fault, uncommon woes

Releasing flood waters through 59 gates for two consecutive days by the Hirakud dam caused the unprecedented flood havoc over Mahanadi. On the 6th of September, when the water storage level of the dam was at 625.60 feet, 10 sluice gates were open to release flood waters. However, on 9th and 10th, 59 gates were force opened. This not only created floods downstream but also in Ambhbana of Bargarh and Lakhampur of Jharsuguda districts at the upstreams. The flood water immediately flooded Sambalpur, Sonepur and Boudh districts and later, after reaching the delta area, it flooded the lower riparian districts. Experts warned that this havoc was created due to mismanagement of the dam operations as well as due to lack of co-ordination between the dam authorities and Chhatisgarh. Political parties blamed the government for this menace. Experts also questioned the effectiveness of the old and obsolete 'Rule Curve'. However, some common yet significant issues are not coming into the debate anywhere.

In general the excessive rain over Chhattisgarh and the resultant inflow of water into the reservoir is being blamed for this flood situation. However, according to Saroj Kumar Mishra, Chief Engineer of the dam, during the time of this heavy flooding, only 1, 77,000 cusecs feet while at that time the dam was receiving an inflow of 11,00,000 cusecs. So, Chhattisgarh alone cannot be blamed for the flood that was. *Ib* and *Bheden* rivers were contributing 1, 00,000 cusecs of water each. Rest of the water has come from other small rivers and rivulets filling into the Mahanadi at the upper catchment. And there is no system in place with the water resources department to know the water condition of these small systems. To measure the inflow of flood water into Hirakud dam, the water resources department has flow meters at Gherari, Nandaghat, Sourinarayan, Champa, Saradihi, Tarapur, Deogaon

and Kherual. In these places, both rainfall and flow statistics are collected and then those are supplied to the dam authorities. In each of these stations, one Work *Sarkar* and four temporary workers are placed. These temporary workers are engaged only for four months of a year. These workers face a lot of problems in their day to day works as they don't have proper places to stay and then they have to depend on boats to do the measuring job. So, many a time, proper information may not be coming from them.

The CWC has also installed 27 such measuring centres at various points above the reservoir. Each of these centres has a junior engineer plus other staff. Saroj Mishra said that the decisions are taken based on the information provided by all these stations. It is also reported that there has been a reduction of staff in the dam and even the dam authorities do not have sufficient staff to open all the gates in emergencies. That's the reason, the gates take one hour to open even after orders are given. It's now established that the dam operation needs a perfect combination of both technical knowledge and experience. However that's certainly missing.

Source: The Dharitri, 13th September 2011

On an another note, we would like to inform you that the current Chief Engineer of Hirakud joined his current position in June and will retire in November. He has never worked in Hirakud dam in his service period.

LOOKING BACK

World Bank report confirms what WIO had said 3 years ago!!

Sambalpur 27.5.2009

What 'Water Initiatives Orissa (WIO)' had found out three years ago have been substantiated now by a World Bank report, titled 'Climate Change Impacts in Drought and Flood Affected Areas: Case Studies in India'. The World Bank report, which took Orissa as a case study of flooding in a climate change scenarios - has referred to projections that 'temperatures, precipitation, and flooding are likely to increase, with adverse impacts on crop yields and farm incomes. Among the more substantial effects is a spatial shift in the pattern of rainfall towards the already flood-prone coastal areas'. Three years ago the WIO had found out significant increase in average annual rainfall in coastal districts like Baleshwar and Puri. Now the World Bank report has projected 23 per cent increase in annual mean rainfall in that region.

Latest report from the World Bank says that Orissa's climate is deteriorating rapidly. - Rainfall in flood prone coastal areas to be higher. - Report also projects dramatic temperature rise of up to 3.7 degree Celsius. - Water Initiatives Orissa (WIO) had warned of such trends with clear examples 3 years ago. - WIO demands that Orissa government must prepare 'Orissa Climate Change Mitigation Plan' now and start sincere action.

This shift in rainfall will result in 'dramatic increase in the incidence of flooding', says the report. Elaborating on that, the report cautions that the probability of discharge exceeding 25,000 cubic meters per second (about 9 lakh Cusec) at Naraj may grow from the present 2 percent to 10 percent due to climate change.

The World Bank report has also mentioned that average annual maximum temperature will increase between 2.3 to 3.7 degree celcius. This is also one trend that the WIO has already established very clearly with startling figures that average annual highest recorded temperature has increased everywhere in Orissa and up to 6.6 degree Celsius in centres like Sambalpur in just a decade. Even cities with moderate climates like Puri and Gopalpur centres have shown an increase of 2 degree Celsius or more.

Following on that finding, the WIO had pursued a state-wide public perception study of climate change. That study clearly indicated such distinct geographical phenomenon within the state including extraordinarily high changes in temperature in some places, especially in the coal/mining and industrial belts, the temperature rise has surpassed by several degrees from the average increase that has been found out by the WB.

We are continuously alerting the people about serious climate degradation in Orissa since we have found unnatural trends. But required seriousness has not been shown. Now, we cannot escape without serious intervention by government. So far as organizations like World Bank are concerned they often release such reports as a prelude to more loans. But till now the World Bank or any other such organizations have not laid out any major climate change mitigation plans, except the coastal livelihood project. We demand serious action and strategic intervention to include environment conservation in real earnest. For that we need to have a clear and well laid out 'Orissa Climate Change Action Plan'. Without waiting for big loans from World Bank like institutions we can utilize the NREGS to create climate combating resources. We must act now to stop disasters from happening and not wait for eternity when we are left bereft of any option to reverse the damage.

Flood Damages in Odisha during 2006-2009

Flood 2009

1.	No. and name of the districts affected	15 (Balasore, Bhadrak, Cuttack, Ganjam, Jajpur, Kalahandi, Kandhamal, Kendrapada, Keonjhar, Khurda, Koraput, Nayagarh, Puri, Subarnapur & Sundergarh)
2.	No. of villages affected	1451
3.	Population affected	3.94 lakh
4.	No. of human lives lost	56
5.	Crop Area affected	1.29 lakh hectare
6.	No. of houses damaged	12547 (Fully – 870, partially – 11677)
7.	No. of persons evacuated	62200
8.	No. of boats deployed for evacuation	90
9.	No. of relief camps opened	80
10.	No. of persons accommodated in relief	64346 camps

Flood 2008

Damages	September	June
No. of Districts affected	19	6
Blocks affected	145	25
GPs affected	1880	277
Villages affected	8026	1768
ULBs affected	29	9
Population affected (In lakh)	45.23	14.94
Human lives lost	96	14
Houses damaged	212965	45,190

The Ministry of Home Affairs, Government of India had reported the floods of September'08 as an "Unprecedented Flood Situation" on 20th September 2008, vide their letter No.11011 / 2008 MHA-DM-I Dt.20.09.08.

Flood 2007

	July	August	Sept
No. of District Affected	12	15	10
No. of Blocks Affected	46	100	66
No. of GP Affected	304	952	969
No. of villages Affected	1865	4865	5677
No. of ULB Affected	5	20	12
Crop Area affected (in lakh hectare)	1.21	1.97	
Population affected (in lakh)	13.32	22.47	42.35
Human live lost	32	20	39
Livestock lost	19495		
No. of houses damaged	27810	76902	

Flood 2006

No. of District Affected	27
No. of Blocks Affected	245
No. of GP Affected	3574
No. of villages Affected	18912
No. of ULB Affected	73
Crop Area affected (in lakh hectare)	4.65
Population affected (in lakh)	67.39
Human live lost	105
Livestock lost	1656
No. of houses damaged	

Source: OSDMA

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NEWS

Flood situation still grim across Orissa

The flood situation in Orissa continued to remain grim on Monday with more number of breaches being reported from coastal Orissa districts. At least three helicopters, two from the Indian Navy and the third one provided by the Union government, were pressed into flood service. At least 15 quintals of dry food items were air-dropped in the marooned areas of Puri, Kendrapara and Jagatsinghpur district.

According to special relief commissioner P.K. Mohapatra, at least 97,117 people were evacuated from low-lying areas to safer places and given dry food. As water levels in Mahanadi, Chitrotpala, Kathajuri, Luna, Karandi and Birupa, Paika, Kuakhia, Daya, Bhargavi, Kushabhara and Dhanua showed receding, the state administration stepped up the post-reparation work by sending medical teams to the affected pockets.

Chief secretary Bijoy Kumar Patnaik, who reviewed the flood situation and relief operation work at the state secretariat, said the administration had focused on sanitation activities in the areas where flood water had receded.

“Since post-flood period witnesses outbreak of various diseases like cholera and diarrhoea, we are focusing on carrying out massive sanitation work. Medical teams have already been sent to areas like Sonepur town, Banki, Binika and Sambalpur to provide immediate healthcare to affected. Besides skilled and trained personnel have been sent to those areas for chlorination of drinking water resources,” he said. At least 17 lakh people in 19 districts have been severely hit in the flood.

Three more people were swept away in the flood on Monday. With reports of three more deaths coming from Sambalpur, Puri and Kendrapara districts, the death toll during the current high flood rose to 19. Nearly a dozen people are still missing.

Communication between Sambalpur-Cuttack, Sonepur-Cuttack, Sonepur-Boudh and Bhubaneswar-Konark still remains disrupted as over five-feet flood water was flowing over major roads.

Thousands acres of standing paddy crop has been damaged in the flood.

Meanwhile, state water resources secretary Suresh Mohapatra said the flood situation was likely to improve by the evening.

Source: The Deccan Chronicle, 13th September 2011

Orissa Disaster Management authority fails to tackle flood

Bhubaneswar: The manmade situation along with the flood has created a havoc for the flood affected people in Orissa. Till now the lack of official response and coordination among different departments of Orissa govt. has increased the sufferings of lakhs of people.

Most astonishingly, the Orissa State Disaster Management Authority (OSDMA), which has been formed to deal with emergency situation in calamities, appears to be absent from the scene.

The current flood exposed the lack of coordination among top officials responsible for combating emergency situation. Revenue and Disaster Management Secretary and OSDMA Managing Director were found missing when the State government struggled to cope with the situation.

As per sources, OSDMA was in possession of over 100 inflatable outboard motorised engine boats. But half of the fleet was not in running condition. It is alleged that even when flood looked imminent in the first week of September, required number of boats were not mobilised for sending to the affected regions.

Similarly, the emergency telephone number of OSDMA is not working and many of the calls of flood victims are going unanswered. The new Managing Director who took over few months ago, seems to be lacking in coordinating all these happenings.

Thousands acres of standing paddy crop has been damaged in the flood.

Source: Orissadiary, 13th September 2011

Three Floods in 3 Months

Balasore: Around 50 villages in Baliapal, Bhograi and Jaleswar blocks of the district have been inundated due to flood in the river Subarnarekha. As many as 173 villages have been affected in the three blocks besides Basta and Rasgobindpur.

For residents of northern parts of Balasore, this is the third consecutive flood of the season.

Though the river is flowing below the danger mark, thousands of people continue to be marooned as water could not be released into the sea following the full moon on Monday. As the sea water entered into the river due to high tides, flood water inundated more areas.

Officials said the situation would continue till Tuesday. Though the damage assessment is underway, initial reports suggested that 62 villages under 14 panchayats in Bhogarai, 35 places under 10 panchayats in Jaleswar, 68 villages under 17 panchayats in Baliapal, five villages under two panchayats in Basta and three in Rasgobindpur block have been affected.

People in the flood-hit villages alleged that though they had experienced three floods in the last three months, they have not been provided any relief till. "We have not even received crop damage assistance. Paddy and vegetable crops in thousands of acres stand submerged," alleged Subodha Pradhan, a farmer.

Source: The New Indian Express, 13th September 2011

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A report by BBC

...Meanwhile, in India's eastern Orissa state more than one million have been displaced and 16 killed in floods.

About 2,600 villages have been submerged across 19 districts. The army and navy have been called in to help as many villagers are still stranded and dependent on food drops from helicopters.

...Officials in Orissa, India, said at least 61,000 people had been evacuated to safety and relief and rescue operations had begun.

Several rivers, including the Mahanadi, are overflowing and flood waters have severed a number of key road links.

Some areas had been cut off due to breaches in river banks and embankments and helicopters were the only way to bring food and water to people stranded there, Mr Mohapatra said.

Orissa's Chief Minister Naveen Patnaik said that the authorities were taking all measures to bring aid to those affected, adding that the state might seek help from central government.

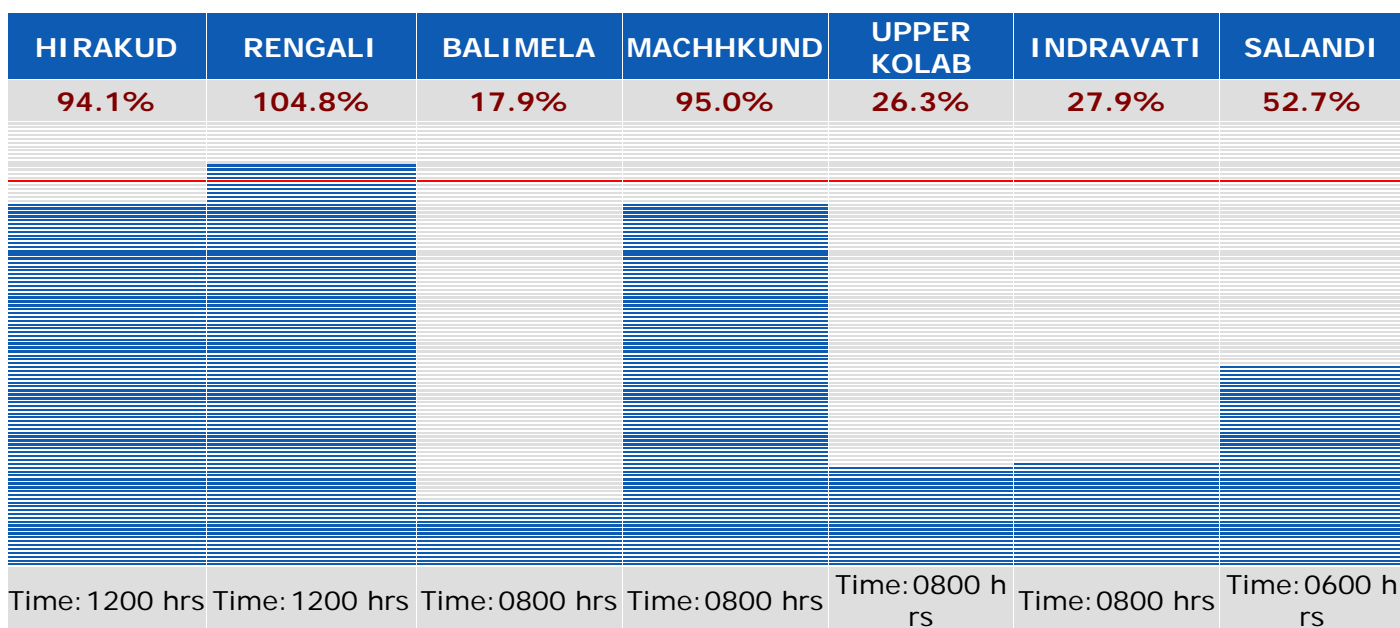
Officials said the situation was expected to get better soon as rains had stopped and the water level in the Mahanadi and other rivers had begun to recede.

Source: bbc.co.uk, 13th of September, 2011

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STATS

Live Storage Filling of Major Reservoirs as on 12-Sep-2011



Reservoir Level & position wrt. Full Reservoir Level

RL: 628.47ft	RL: 123.92m	RL: 1460.6ft	RL: 2748ft	RL: 849.36m	RL: 630.98m	RL: 73.68m
(-) 1.53ft	(+) 0.42m	(-) 55.40ft	(-) 2.00ft	(-) 8.64m	(-) 11.02m	(-) 8.62m

Reservoir Inflow & Outflow

I: 364919Cusecs	I: 3600.18Cumecs	I: 171.92CumeCS	I: 43.17Cumecs	I: 64.74CumeCS	I: 153.27CumeCS	I: 64.51CumeCS
O: 396686Cusecs	O: 4089.41Cumecs	O: 78.52CumeCS	O: 43.17Cumecs	O: 33.69Cumecs	O: 58.01CumeCS	O: 1.2Cumecs

Live Storage capacity & Live Storage available

Cap: 482155 Ham	Cap: 341371 Ham	Cap: 267600 Ham	Cap: 96993 Ham	Cap: 93500 Ham	Cap: 148550 Ham	Cap: 55650 Ham
LS: 453543 Ham	LS: 357671 Ham	LS: 47954.35 Ham	LS: 92111.97 Ham	LS: 24544 Ham	LS: 41516.05 Ham	LS: 29333 Ham

The **RED** line corresponds to **Full Reservoir Capacity**

Source: <http://www.dowrorissa.gov.in/Flood/ReservoirGraph.htm>

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Met Speaks

12-Sep-2011 Evening Weather Bulletin

MAIN WEATHER OBSERVATIONS (Recorded during past 24 hours)

♦ Analysis of current meteorological conditions indicates that withdrawal of monsoon is not likely to commence during next 4-5 days

♦ From 0830 hours IST of yesterday to 0830 hours IST of today, widespread rainfall occurred over Gujarat state, south Rajasthan, Lakshadweep and Andaman & Nicobar Islands; fairly widespread over Madhya Pradesh and along west coast; scattered over Himachal Pradesh, Uttarakhand, Punjab, Orissa, Vidarbha, Madhya Maharashtra, Tamilnadu and northeastern states and isolated over remaining parts of the country outside Jammu & Kashmir and Marathwada where weather remained mainly dry. The chief amounts of rainfall (3 cm and above) recorded at 0830 hours IST of today are: Long Islands-16, Mayabandar-12, Dwarka, Erinpura and Car Nicobar-11 each, Mount Abu and Non Cowry-10 each, Jalore-

9, Udaipur and Deesa-8 each, Bulsar-7, Ratlamand Karaikal-6 each, Nahan, Bhira and Kakinada-5 each, Chittorgarh, Banswara, Surat, Okha, Mahabaleshwar, Mumbai (Colaba), Agumbe, Tiruppattur and Port Blair-4 each and Patiala, Jhansi, Bundi, Baroda, Idar, Damoh, Tikamgarh, Ujjain, Pendra, Alibag, Mumbai (Santacruz), Vengurla, Mangalore and Hut Bay-3 each

Synoptic features (based on 1430 hrs IST Observations)

Satellite Observations:

◆ Kalpana-1 cloud imagery at 1430 hours IST shows convective clouds over parts of southwest Rajasthan, east Uttar Pradesh, Saurashtra & Kutch, north Chhattisgarh, Orissa, north coastal Andhra Pradesh, Kerala, Tamilnadu, central & south Bay of Bengal, Andaman Sea and northeast & southeast Arabian Sea. Low/medium clouds are seen over remaining parts of the country.

Major features of weather forecast (upto 1430 hours IST of 15-Sep-2011).

- ◆ Scattered rain/thundershowers would occur Orissa, Andhra Pradesh and Chhattisgarh during next 24 hours and increase thereafter.
- ◆ Isolated rain/thundershowers would occur over remaining parts of the country.

Warning

- ◆ Isolated heavy to very heavy rainfall would occur over south Rajasthan, Gujarat state and Andaman & Nicobar Islands during next 24 hours.
- ◆ Isolated heavy rainfall would occur over Kerala and Lakshadweep during next 48 hours.

Weather Outlook (upto 1430 hours IST of 17-Sep-2011)

- ◆ In association with western disturbance, fairly widespread rain/thundershowers would occur over western Himalayan region and adjoining plains of northwest India.
- ◆ Fairly widespread/thundershowers would occur over central & adjoining peninsular India and northeastern states.

Source: IMD

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Water Initiatives Odisha: *Fighting water woes, combating climate change...* more than two decades now!

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Please join our group 'Save Rivers Save Civilizations' at <http://www.facebook.com/groups/220598744649462>

Kiss the rain when you can, because water and abundance are falling apart...(Ranjan Panda)

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Water Initiatives Odisha (WIO) is a state level coalition of civil society organisations, farmers, academia, media and other concerned, which has been working on water, environment and climate change issues in the state for more than two decades now.