



Working with communities to conserve the Ganges river dolphin and the ecosystem



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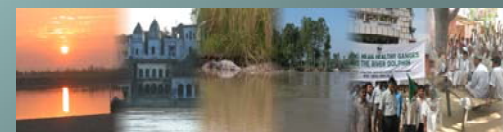
GANGA RIVER BASIN





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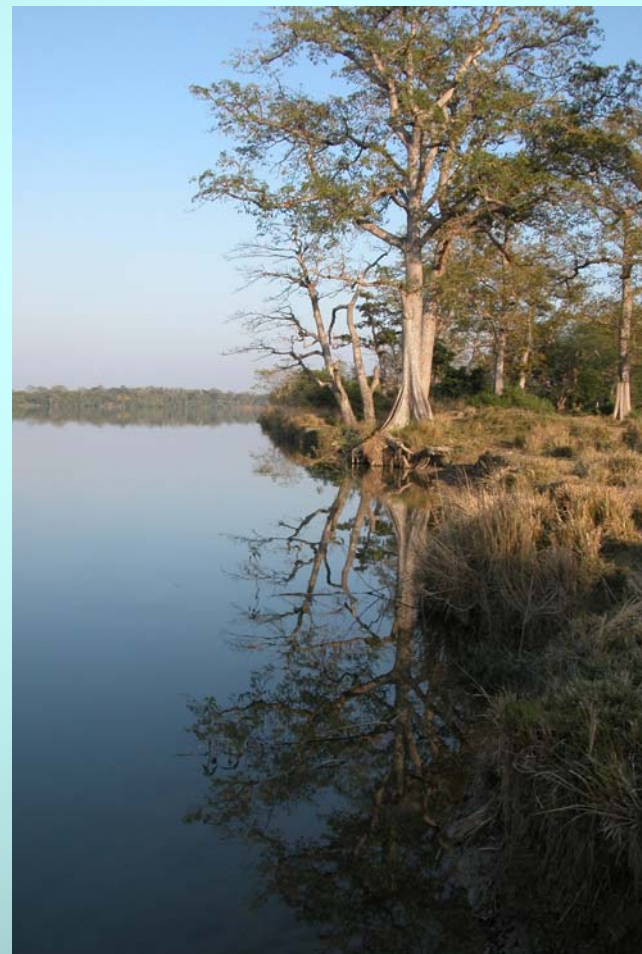
Background

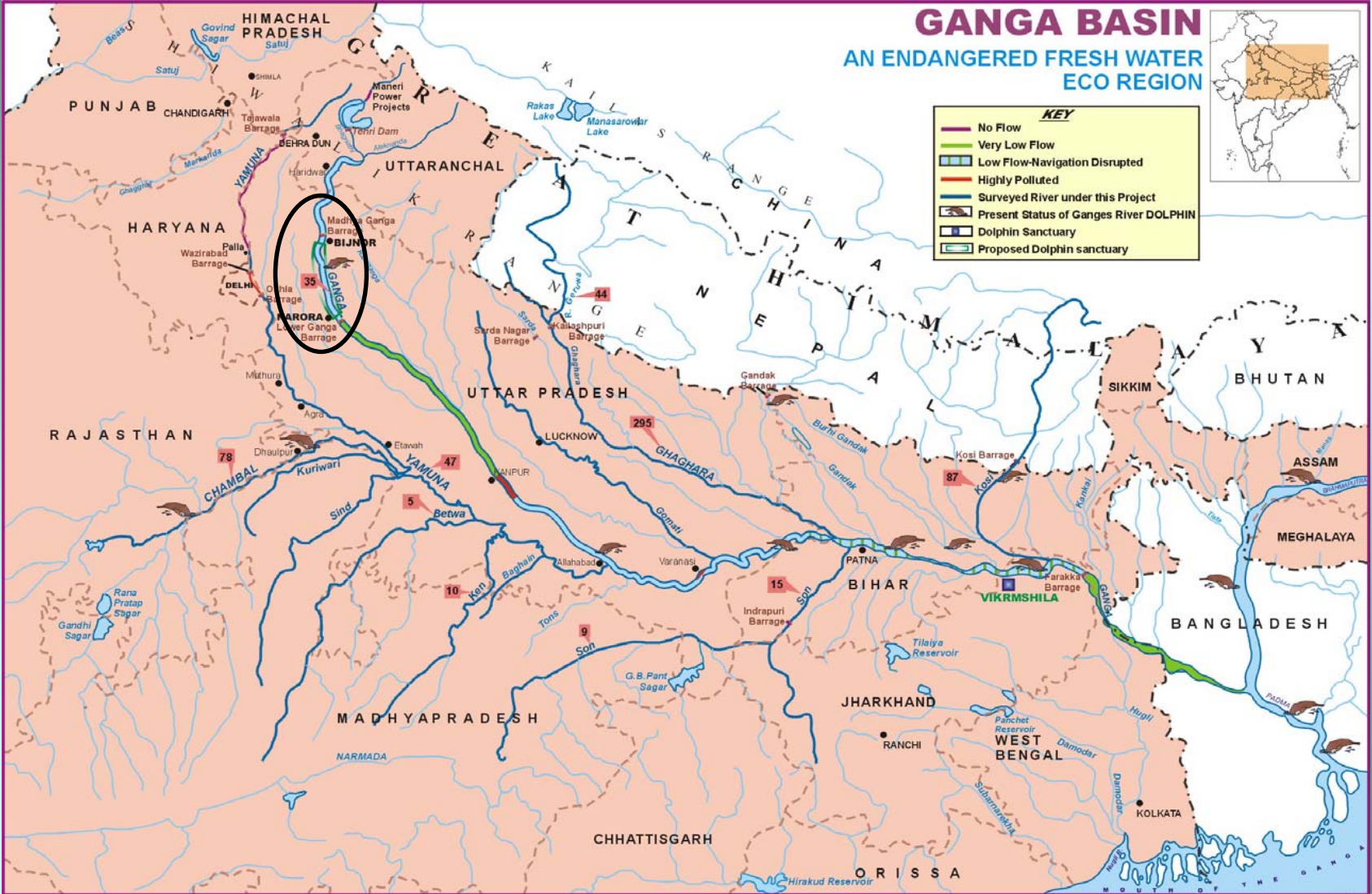
Ganges River Basin

largest river basin in India (861,404 km²)

Source of livelihood for over 450 million people (40% of India's population).

Supports rich aquatic biodiversity





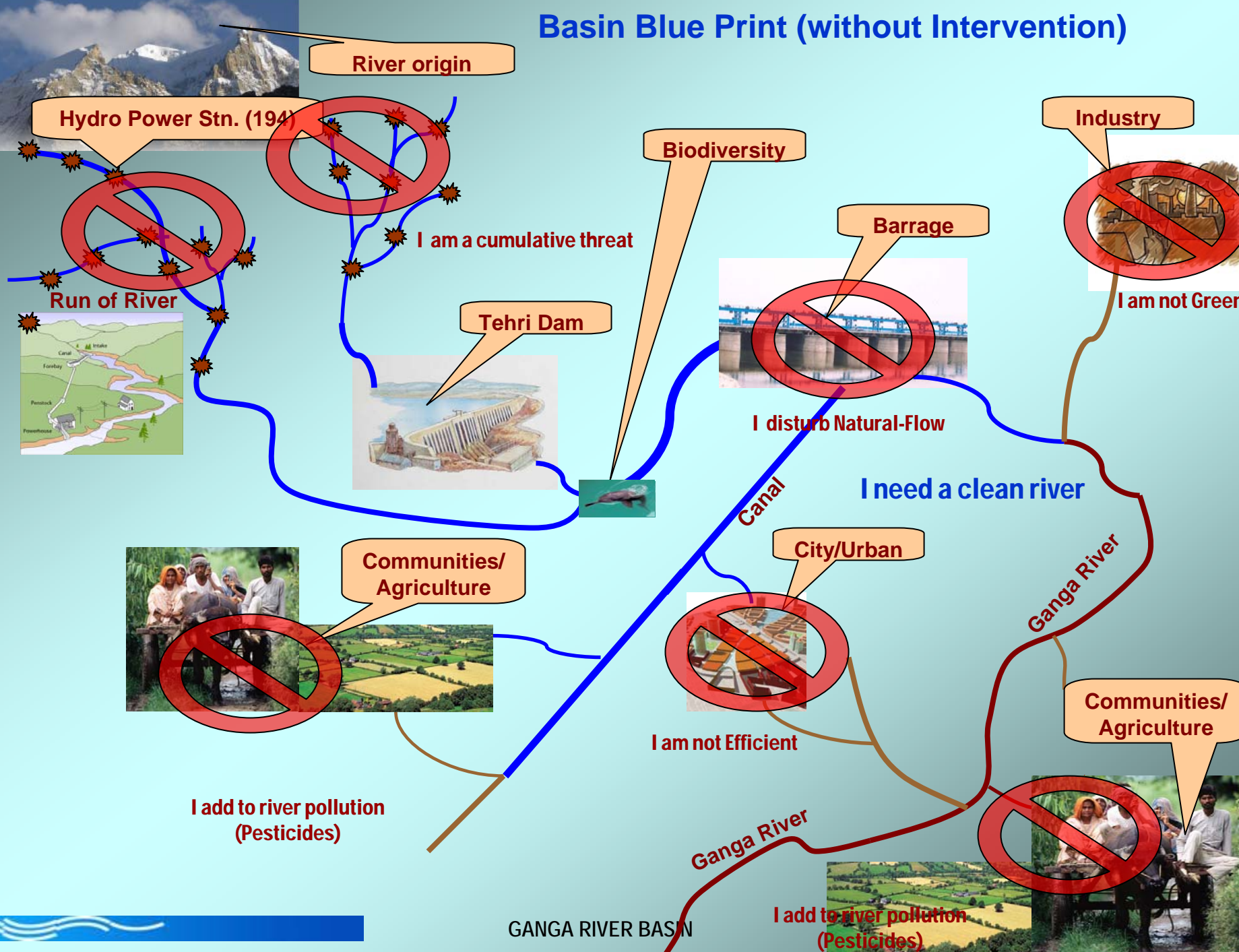
Data Sources :-
Ganges River Dolphin data, WWF-India

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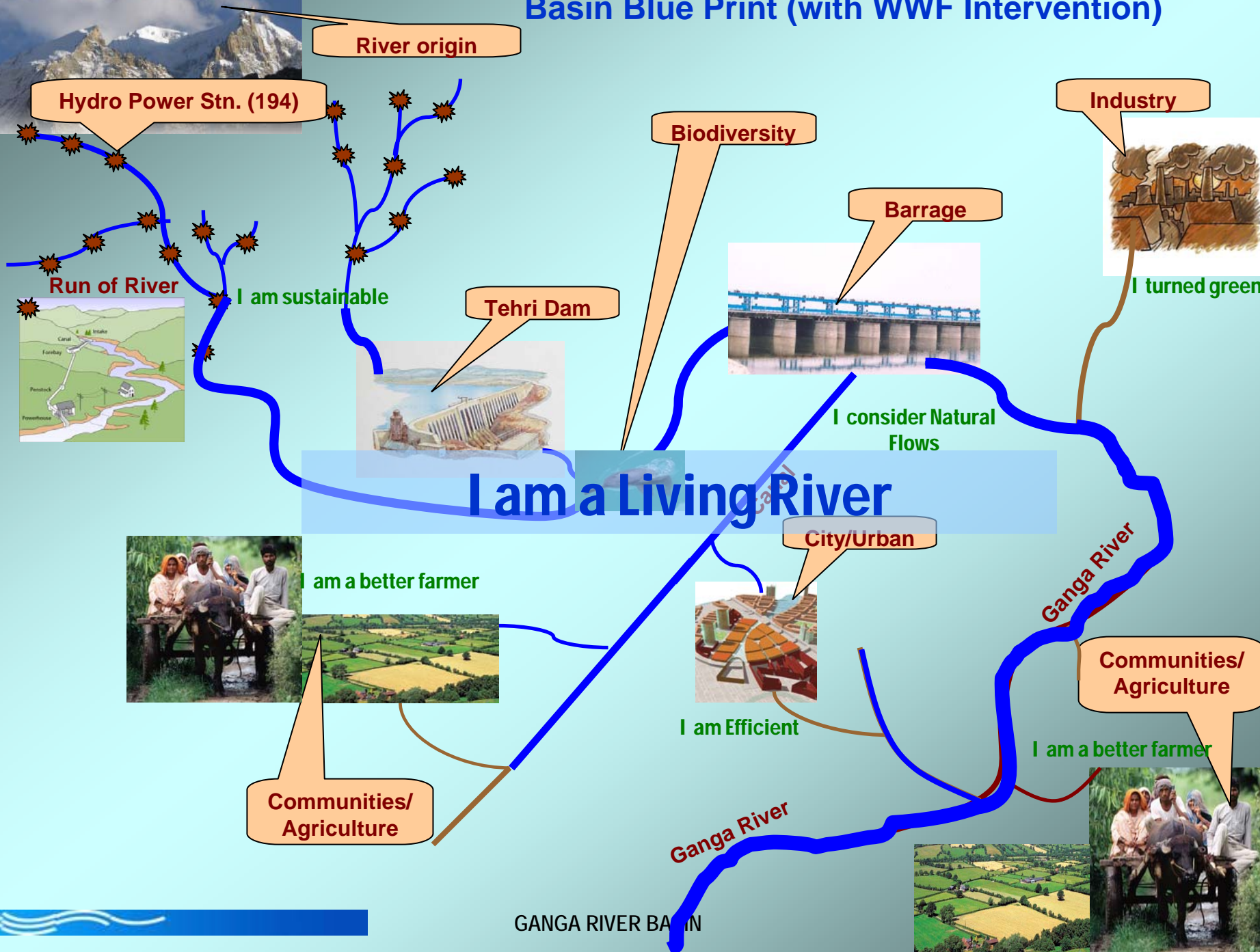
GANGA RIVER BASIN



Basin Blue Print (without Intervention)



Basin Blue Print (with WWF Intervention)





Ganges River dolphin Conservation and livelihood assessment in Farida Village

WWF establishes a project – 2001

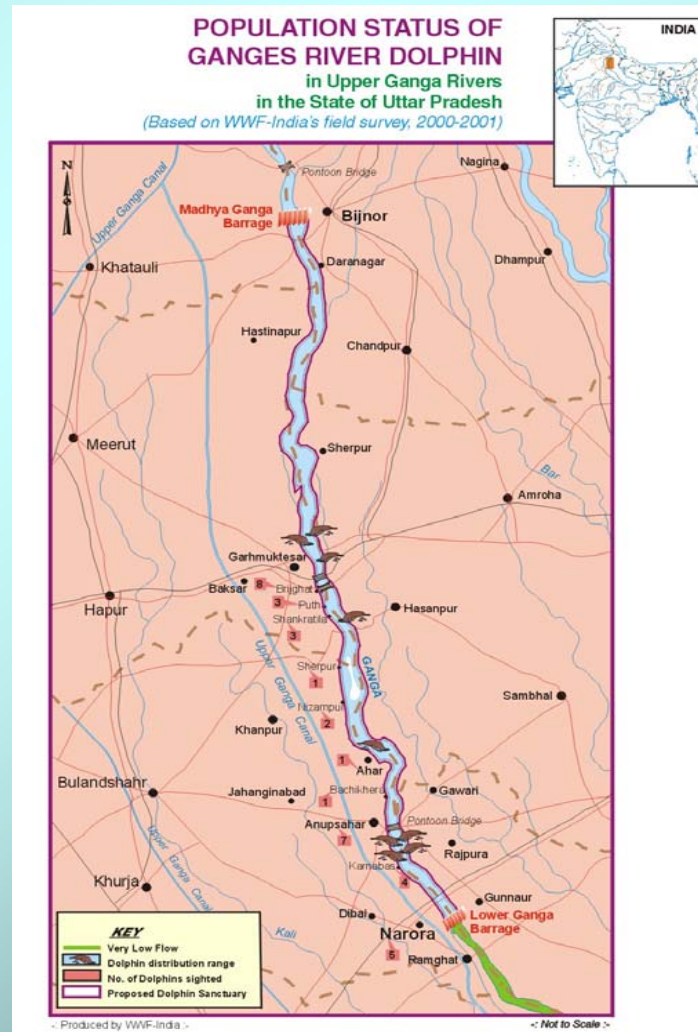
To involve local communities in aquatic biodiversity conservation with dolphins as flagship species

Why *Farida* village?

Local communities were most backward and highly dependent on the river sources for livelihood thereby directly impacting dolphin habitat

How?

Conservation through community based management practices





METHODS AND MODULES

Social Approach

Biodiversity Monitoring

Awareness Programmes

Community Level Meetings

Identification and prioritization of local environmental issues through the involvement of the **Gram Panchayat**

Estimation of dolphin population

Habitat status

Threats to dolphins & their habitats

Assessment of the availability of aquatic resources

Media campaigns

Seminars & Drawing competitions

Distribution of pamphlets

Motivational talks by religious leaders (**Sadhus**)



Preparation of a village development plan with an emphasis on local environment issues

Resource mobilization for implementation of the plan through community and PRI participation





DATA COLLECTION

- A randomly selected sample of the village was surveyed through a series of interviews and observations, using Participatory Rural Appraisal (PRA) methodologies
- The sample consisted of 62 households (approximately 10 per cent of the village) with an average household of seven, equalling a total of 438 people (247 males and 191 females)
- Several meetings and discussions through **PRA** were held with the *Gram Sabha* to generate a better understanding of their livelihood strategies *viz-a-viz* environmental conservation
- Standardised surveys were regularly conducted for monitoring habitat suitability for Ganges River Dolphins



RESULTS AND DISCUSSION





Building livelihood strategies...*through conservation initiatives*

Item	2001	2005
Mean	374	450.45
(±) S.E	30.15	33.96
Minimum	0	0
Maximum	1150	1200



Asset profile of households

Monthly per capita income of Farida Village

Item	2001 (no.)	2005 (no.)	Change (%)
Radio	20	48	140.00
Television	3	30	900.00
Cycle	24	54	125.00
Scooter	3	18	500.00
Cart (Buffalo/bullock)	11	25	127.27
Other	15	64	326.67



Source of water for drinking and irrigation

Source	Drinking		Irrigation	
	% Number of households			
	2001	2005	2001	2005
<i>River water</i>	30.65	8.06	35.19	7.27
<i>Tube well</i>	46.77	91.94	61.11	89.09
<i>Open well</i>	22.58	0.00	1.85	1.82
<i>Others</i>	0.00	0.00	1.85	1.82

Method	Drinking		Irrigation	
	% Number of households			
	2001	2005	2001	2005
<i>Manually</i>	66.67	62.90	13.21	5.66
<i>Motor pump</i>	6.67	32.26	67.92	94.34
<i>Others</i>	26.67	4.84	18.87	0.00

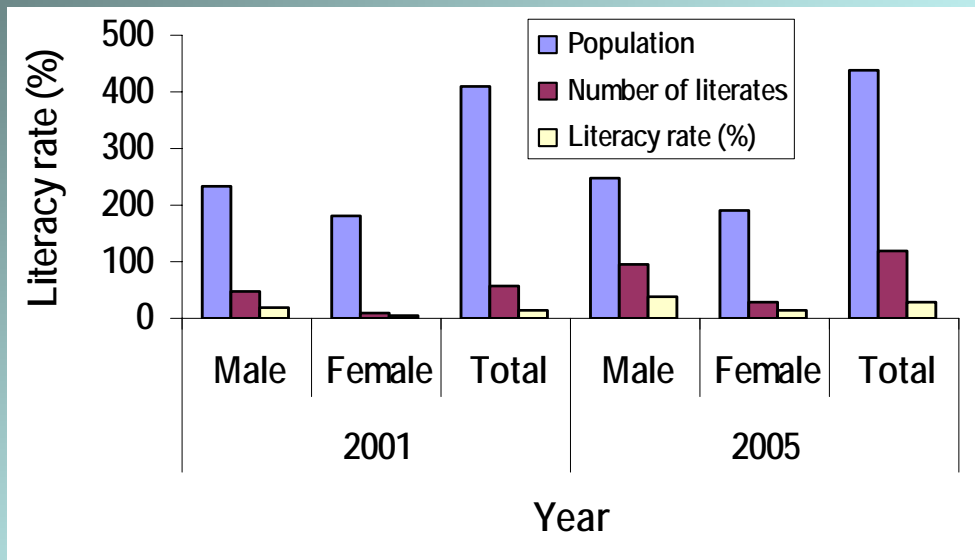


Method of collecting water for drinking and irrigation





Has awareness campaigning brought desired results?



Literacy rate of Farida village
(n = 62 households)

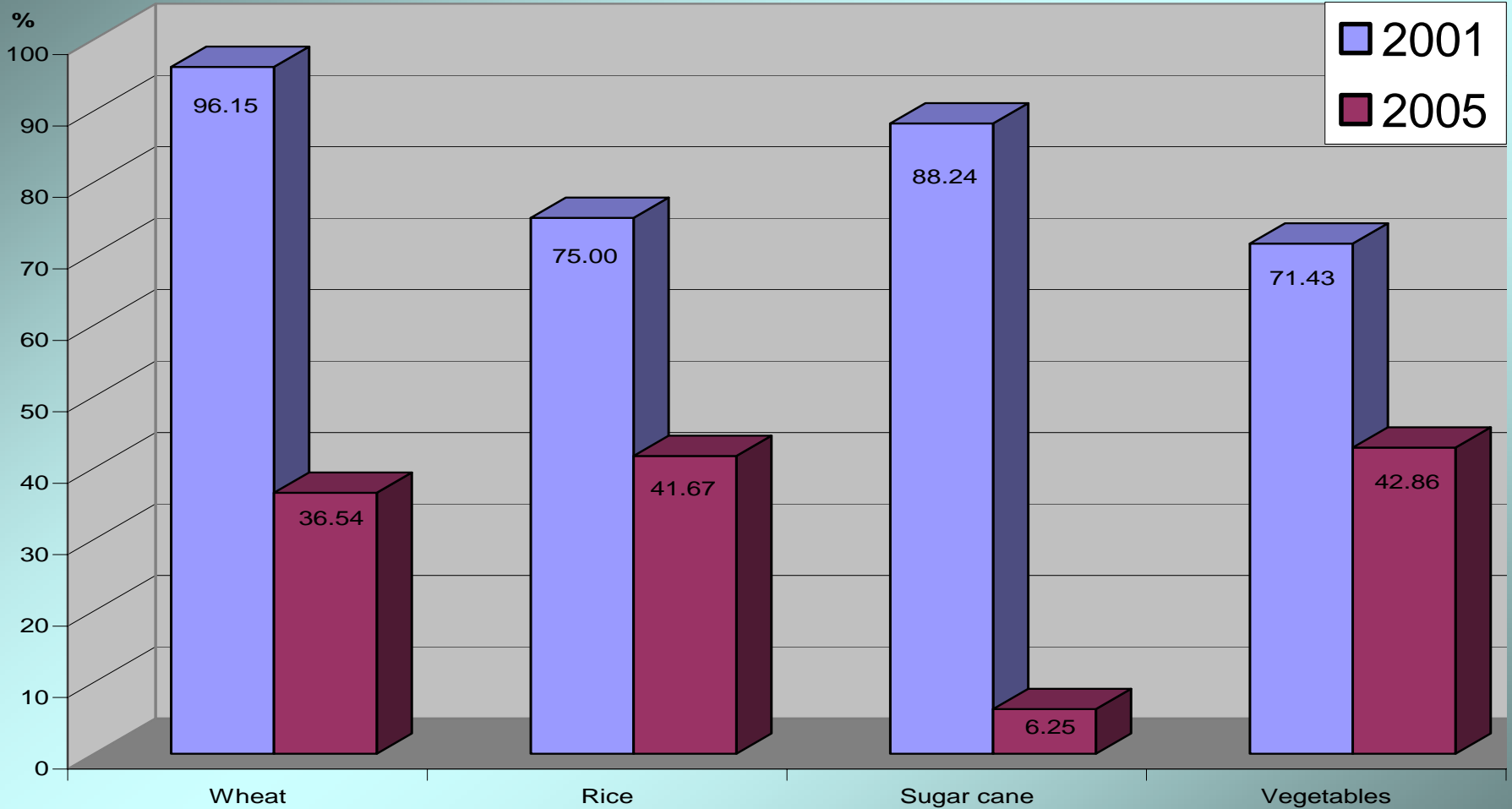


% Number of households

	2001	2005
Cooking		
Fuel wood	37.93	14.04
<i>Upli</i>	62.07	85.96
Lighting		
Fuel wood	17.74	1.64
<i>Upli</i>	6.45	1.64
Kerosine	74.19	90.16
Electricity	1.61	3.28
LPG	0.00	3.28

Main source of energy for cooking and lighting





Changes in use of chemical fertilisers in selected crops





Data on dolphin population growth

Size class	1993-94*	1997-98**	2004	2005
Males	4	7	8	11
Females	6	8	11	21
Adolescent	6	11	13	-
Calves	4	9	7	10
Total population	20	35	39	42

* Data from the Ph. D thesis of S.K.Behera (1995).

** WWF-India Ganges River Dolphin Survey Report (1999).





Summary

Capacity building of the community through meetings, training, workshops

Formulation of *Ganga Sanrakhyan Samiti*, a local level committee to monitor and conduct various activities in this program. It is under the direct supervision of local Administrative Chairman

Improved livelihood conditions and impacts of awareness campaigns encouraged villagers to be more environment conscious

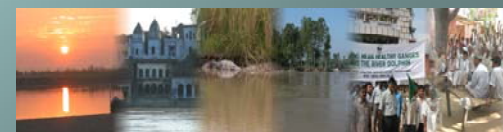
- Reforestation

- Minimizing fuel wood use

- Pollution control

- Sustainable use of aquatic resources

Cont.....





Use of chemical fertilizers and pesticides discouraged and '*cow dung*' is now used as alternative

Commercial sand mining and fishing activities now stopped in most of the places in the stretch

Mortality of dolphins and other major aquatic animals is less frequent

The 82 km river stretch from Garhmukteshwar to Narora has been declared as 'Ramsar site' because of its rich biodiversity and wise use concept

Helped focus media attention on River Dolphin and its conservation with wide coverage by leading national and regional newspapers, magazines and television programs





More on the Web
www.hindustanimes.com

Seer's mission: Save the dolphins

S. Raju
Meerut, March 9

ALTHOUGH HE is a "spiritual Guru" his heart beats for Mother Nature. His new love in nature are "highly endangered river dolphins". This bonding with nature makes him "a sadhu with a difference".

Junapothdheeswar Avdhesanandji's commitment towards nature is different in many ways from other sadhus. While raising his voice for the "conservation of river dolphins" he called upon his thousands of disciples to make all possible contribution to save this unique creature of river system. "They (river dolphins) are blind, lone mammals in river system and are on the verge of extinction", said the santasi urging people to join hands

with WWF-India's campaign for "conservation of river dolphins".

"I love everything related to Ganges and nature", he told the Hindustan Times elaborating that both are lifeline for all living creatures. Moreover, being a sadhu I have a long association with nature and Ganges and our existence without duo is meaningless, explained swamiji.

As a patron of "Save Himalaya" organization with Tibetan spiritual guru Dalai Lama, the Mahatma had been instrumental in organizing first ever water parliament in the country few years ago. Now, he has taken up the task to exhort the minds of nature lovers and the masses to preserve the fast dwindling population of river dolphins. Releasing a poster of



Mahamandeeswar Avdhesanandji releasing a poster related to the conservation of river dolphins in Meerut on Wednesday

Ganges river dolphin conservation programme, he assured his support to the awareness campaign of the WWF scheduled to commence in the first week of

next month from Brighat of Ghazabadi in form of a "motor boat rally".

While tracing Dolphins' mythological link, Swamiji asserted that their descrip-

tions are found in Vedas. Because of its eco- and human-friendly manners it is also popular among icolis as "Cow of Ganges" and its infants are called "cal".

UTTAR PRADESH



GANGA RIVER BASIN