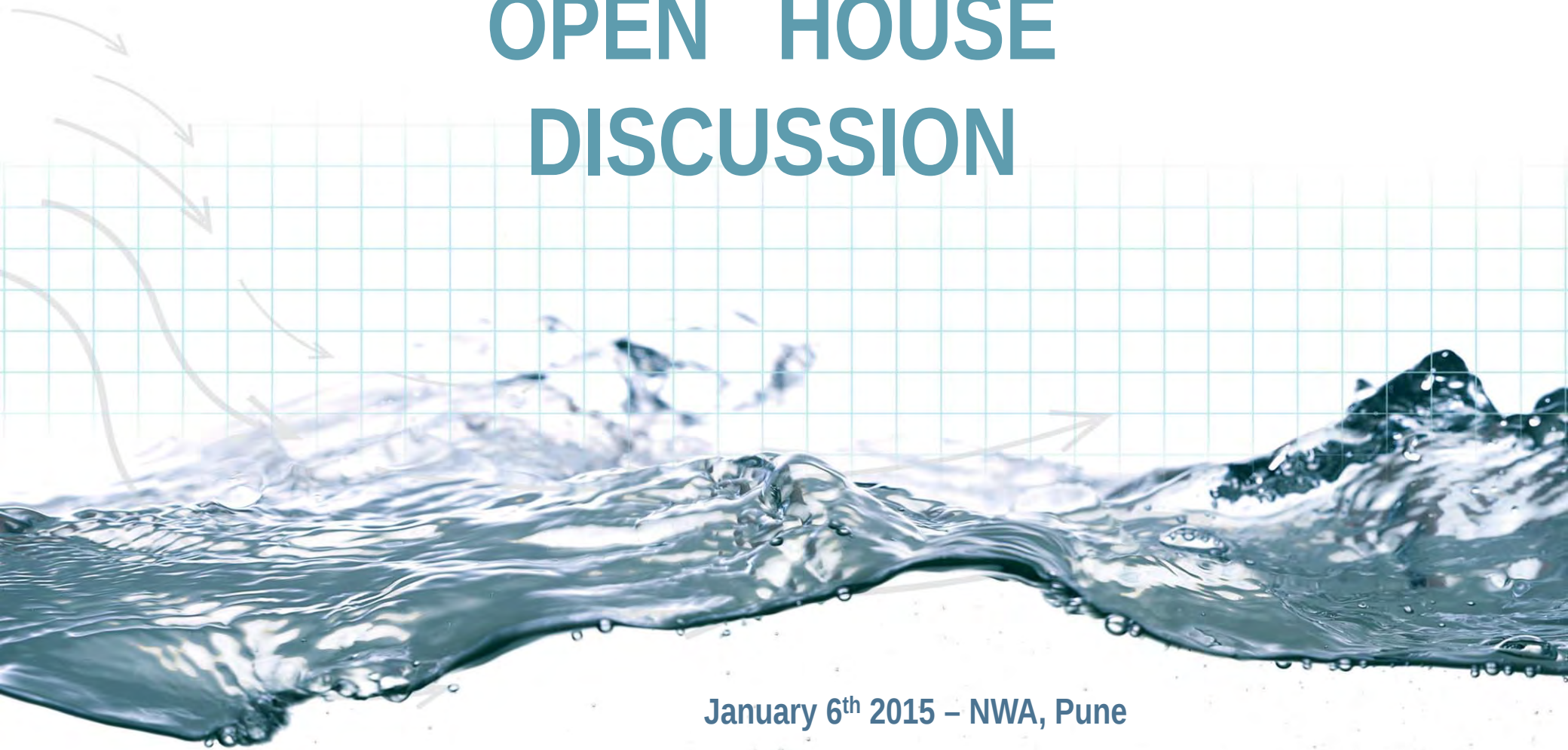


**Training Programme on Integrated River Basin
Planning and Management
(5-9 January 2015)**

**OPEN HOUSE
DISCUSSION**



January 6th 2015 – NWA, Pune

UNESCO- Multi Criteria Analysis

- **Grouping of base indicators into next level and its justification**
- **Basis for assignment of weights & balancing factors to the indicator**
- **Analysis of result**
- **Sensitivity Analysis**



UNESCO- Multi Criteria Analysis

1. Economic sustainability
2. Contribution to foreign exchange
3. Revenue generation
4. Contribution to priority list
5. Increase in jobs
6. Increase in farmer income
7. Increase in non-farmer income
8. Project output
9. Change in water quantity
10. Change in land quantity
11. Change in water quality
12. Change in land quality
13. Effects on wildlife and vegetation

Water Quantity

(billion cubic metre)

Total precipitation : 4000

Total water availability : 1869

Total utilizable water : 1123

Surface water : 690

Ground water : 433

Total water Utilized : 693

Surface water : 450

Ground water : 243





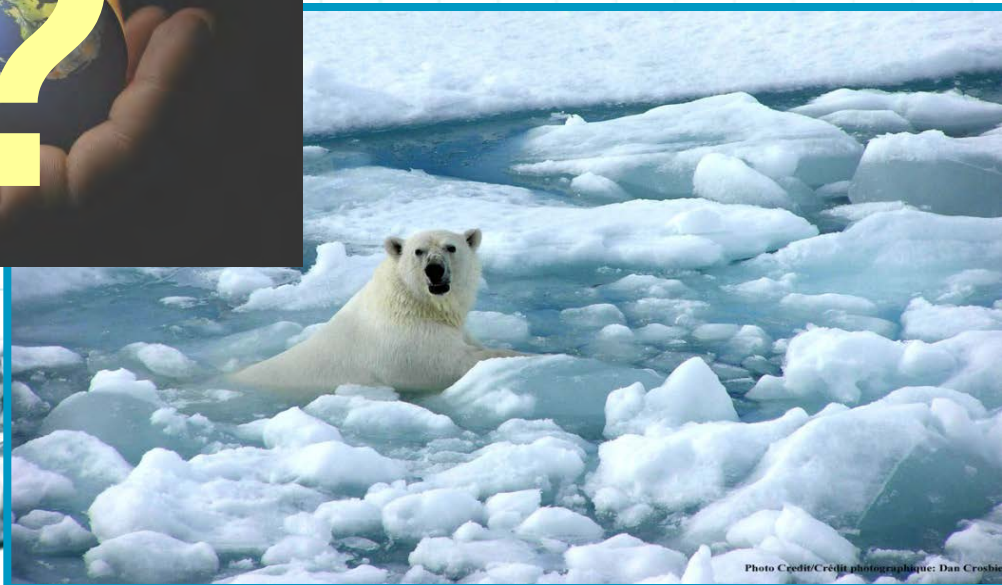


Photo Credit/Credit photographique: Dan Crossie

Water Use Efficiency (WUE)

- Total 43 studies awarded;
- 35 studies completed till date and their Final Report submitted;
- 5 studies are in progress;
- 3 studies could not be continued due to various reasons;
- WALAMTARI, Hyderabad conducted 20 studies;
- NERIWALM, Tezpur, WALMI, Lucknow & Patna and HIRMI & IPRI were other consultants.

Water Use Efficiency (WUE)

- Comparison between the planned efficiencies and actual efficiencies as on date;
- Reason for variation of the above;
- Suggestion for improvement of the efficiencies;



Water Use Efficiency Studies: Outcome

Sl. No.	Name of the Project	State	CCA (Ha)	Conveyance Efficiency	On Farm Application Efficiency (%)	Overall Project WUE (%)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	Bhairavanithippa Project	A.P.	4856	85	67	58
2	Gajuladinee (Sanjeevaiah Sagar Project)	A.P.	10300	57	45	26
3	Gandipalem Project	A.P.	6478	73	38	28
4	Godavari Delta System (Sir Arthur Cotton Barrage)	A.P.	410108	83	54	45
5	Kurnool-Cuddapah Canal System	A.P.	65485	62	45	28
6	Kaddam Project	A.P.	27519	51	36	18
7	Koil Sagar Project	A.P.	11700	83	75	62
8	Krishna Delta Sytem (Prakasam Barrage)	A.P.	529000	87	46	40
9	Nagarjuna Sagar Project	A.P.	889000	56	39	22
10	Narayanapuram Project	A.P.	15855	47	32	15
11	Nizam Sagar Project	A.P.	93656	87	45	39
12	Srisaillam Project	A.P.	59900	50	34	17

Water Use Efficiency Studies: Outcome

Sl. No.	Name of the Project	State	CCA (Ha)	Conveyance Efficiency	On Farm Application Efficiency (%)	Overall Project WUE (%)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
13	Rajolibanda Diversion Scheme	A.P.	35410	82	51	42
14	Somasila Project	A.P.	54650	56	32	18
15	Sir Ram Sagar Project	A.P.	371054	78	57	45
16	Tungabhadra High Level Canal	A.P.	45800	81	58	47
17	Tungabhadra Low Level Canal	A.P.	61163	72	45	32
18	Vamsadhara Project	A.P.	82087	91	58	53
19	Yeleru Project	A.P.	27240	50	28	14
20	Upper Manair Project	A.P.	6984	-	-	-
21	Augmentation Canal Project	Haryana	85443	79	72	57
22	Nagal Lift Project	Haryana	35721	48	27	13
23	Dholabaha Dam Project	Punjab	2600	74	71	53
24	Ranjit Sagar Dam Project	Punjab	300000	51	65	33
25	Ahraura Dam Irrigation Project	U.P.	14964	70	70	49

Water Use Efficiency Studies: Outcome

Sl. No.	Name of the Project	State	CCA (Ha)	Conveyance Efficiency	On Farm Application Efficiency (%)	Overall Project WUE (%)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
26	Matatila Dam Project	U.P.	179680	58	80	54
27	Naugarh Dam Irrigation Project	U.P.	64221	71	70	50
28	Pili Dam Project	U.P.	4044	58	65	38
29	Walmiki Sarovar Project	U.P.	6271	62	62	38
30	East Baigul Reservoir Project	U.P.	16605	64	65	42
31	Kamla Irrigation Project	Bihar	28331	70	74	52
32	Upper Morhar	Bihar	5725	77	40	30
33	Durgawathi Irrigation Project	Bihar	21110	81	65	53
34	Eastern Sone Canal	Bihar	128055	73	73	53
35	Saran Canal Irrigation Project	Bihar	360000	53	69	30
Weighted Average Value				68	53	36

Water Use Efficiency Studies: Outcome

Reasons for poor WUE: Damaged structures & Seepage



Water Use Efficiency Studies: Outcome

Reasons for poor WUE: Silting in the canal systems



Water Use Efficiency Studies: Outcome

Reasons for poor WUE: Poor maintenance of the structure



Water Use Efficiency Studies: Outcome

Reasons for poor WUE: Weed growth in the canal systems



Water Use Efficiency Studies: Outcome

Reasons for poor WUE: Over-irrigation



Water Use Efficiency Studies: Outcome

Reasons for poor WUE: Farmers Awareness level



Water Use Efficiency Studies: Outcome

Reasons for poor WUE: Change of cropping pattern



Open House Discussion

Water Governance



Open House Discussion

Role of Modern Tools in Water Management

