Monitoring and Warning

Color coding of Drought indicator

Jhod nadi, Tributary of Godavari River @ Nanded,Maharashtra

Parameters	Status
Period of difficulty PD	
Frequency of event Fe	
Annual Rainfall ARF	
Aridity index ArT	
Palmer Index PDSI	
Evaporation Eva	
Vegetation cover NDVI	
Total crop area TCr	
Cash crop /cultivated CaCr	
Perennial river flow PeR	
Aquifer type AqT	
Groundwater fluctuation GwF	
Population Density PoD	
Human +livestock HLG	
Agriculture labor OcAg	
Farmer income InCo	
Storage facility Stor	
Medical facility MF	
Transportation network TrN	

Advisory

Watch

Warning

Emergency

Disaster

(anticipated drought situation, ref. table R.Nagarajan/IIT Bombay 2006)

Community Level
Drought Preparedness Assessment

- **Compare**

rainfall amount,
water level in wells & lakes / reservoir with that of previous year

- **IF it is less**

THEN

- **Compare with**

crop area, population, industry etc

- **IF it is less**
- **THEN**

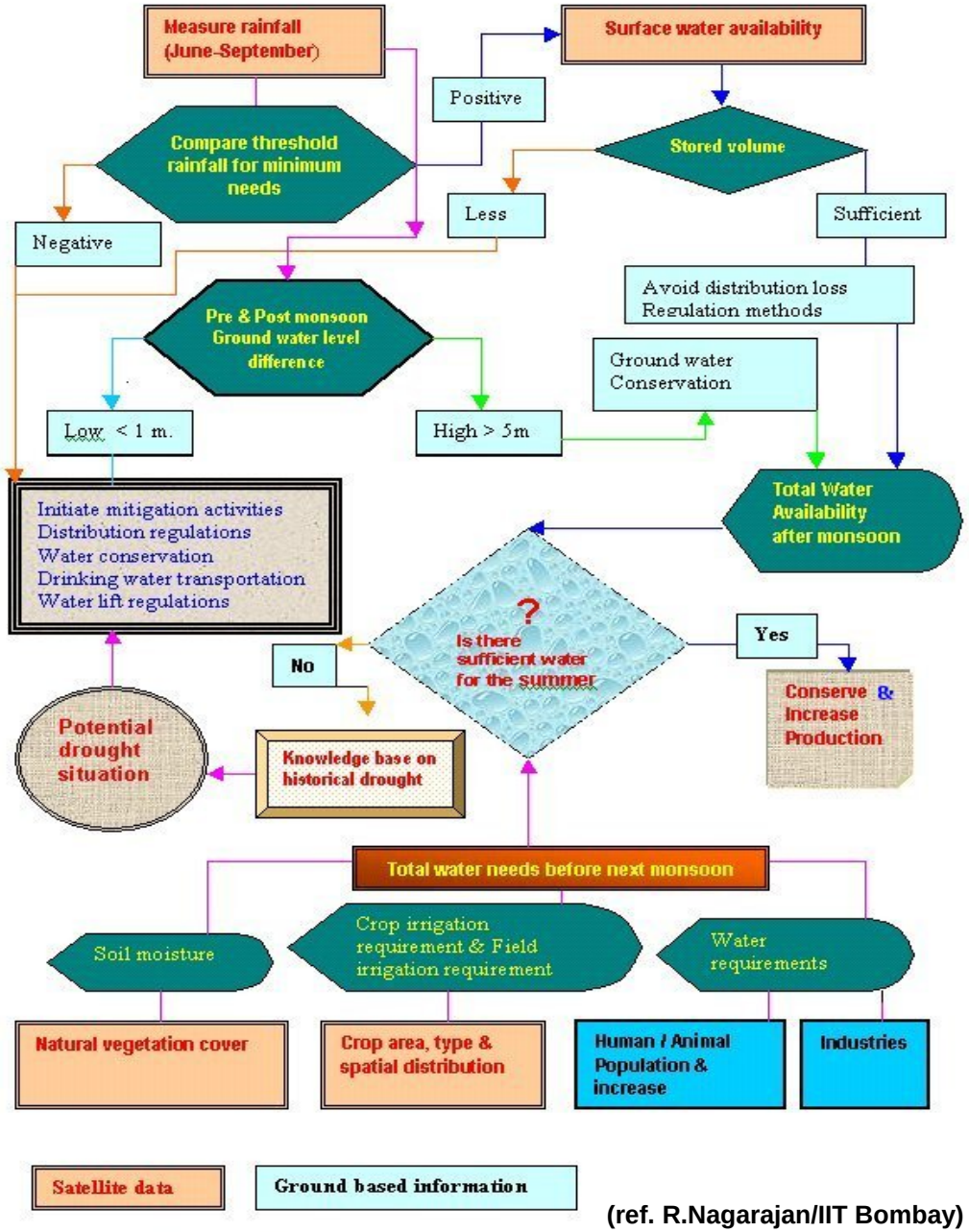
Initiate conservation practices
Or drought preparedness activities

- **IF it is equal or higher**

Share resources & Save resources

Experiment with Drought preparedness measures & consult stake holders prior to execution

(R.Nagarajan/IIT Bombay)



(ref. R.Nagarajan/IIT Bombay)

Drought vulnerability assessment
(immediately after monsoon)

Anticipated Drought Intensity

Assessment is for individual village's Water Demand & supply

Based on

Surface run-off & storage

Demand from human & animal

Irrigation & Drinking water

Storage & conveyance loss

Consideration

Ground water abstraction is minimum or nil to avoid uncontrolled exploitation

Available Storage facility is functiona

Extra resource is not sought for

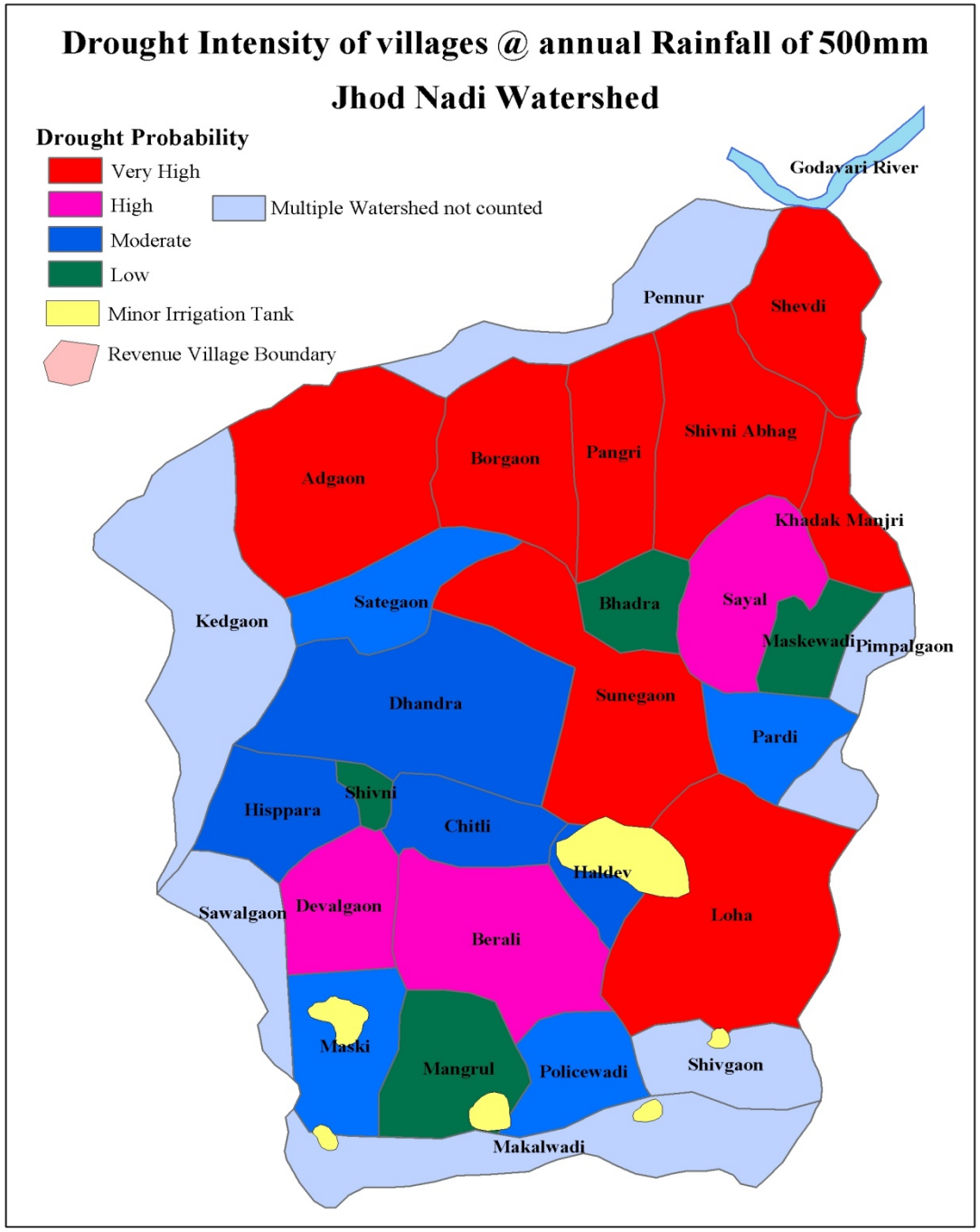
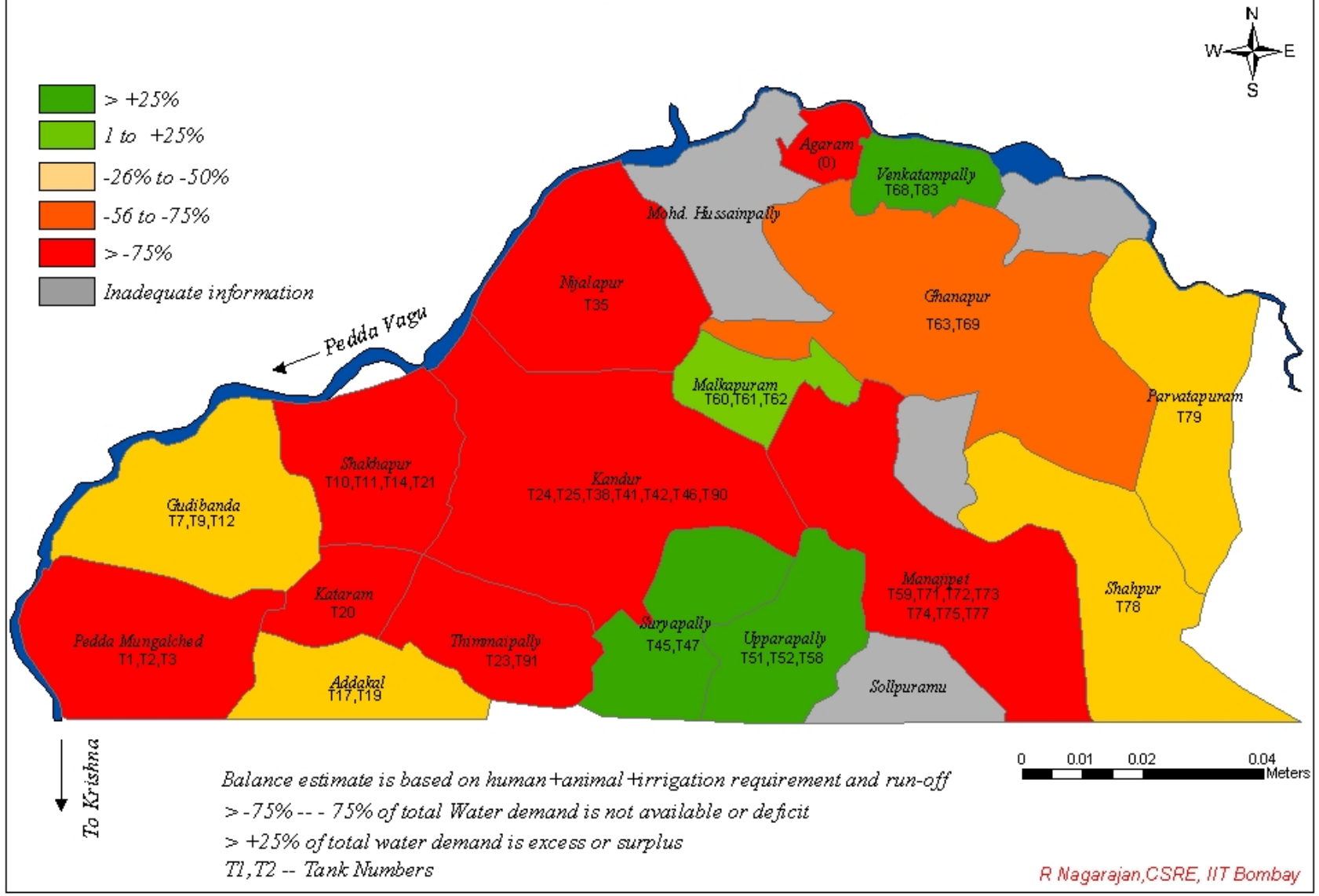


Figure 30 Drought intensity Assessment – Loha-Nanded

Fig 10b:Status of surface water in meeting the village requirements @ annual rainfall 300 mm



Balance estimate is based on human+animal+irrigation requirement and run-off

> -75% -- - 75% of total Water demand is not available or deficit

> +25% of total water demand is excess or surplus

T1,T2 -- Tank Numbers

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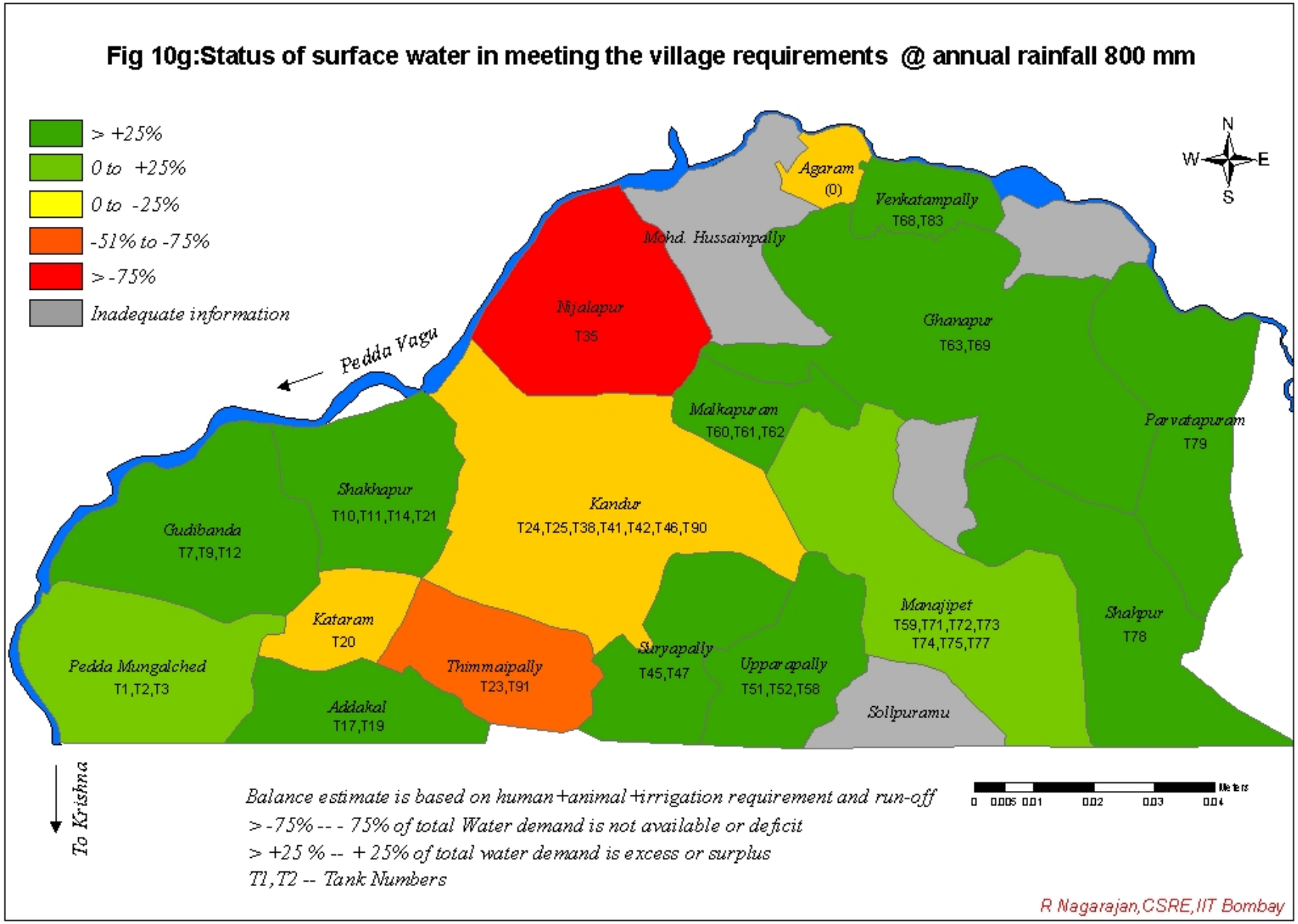
Fig 10g:Status of surface water in meeting the village requirements @ annual rainfall 800 mm



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Thank You