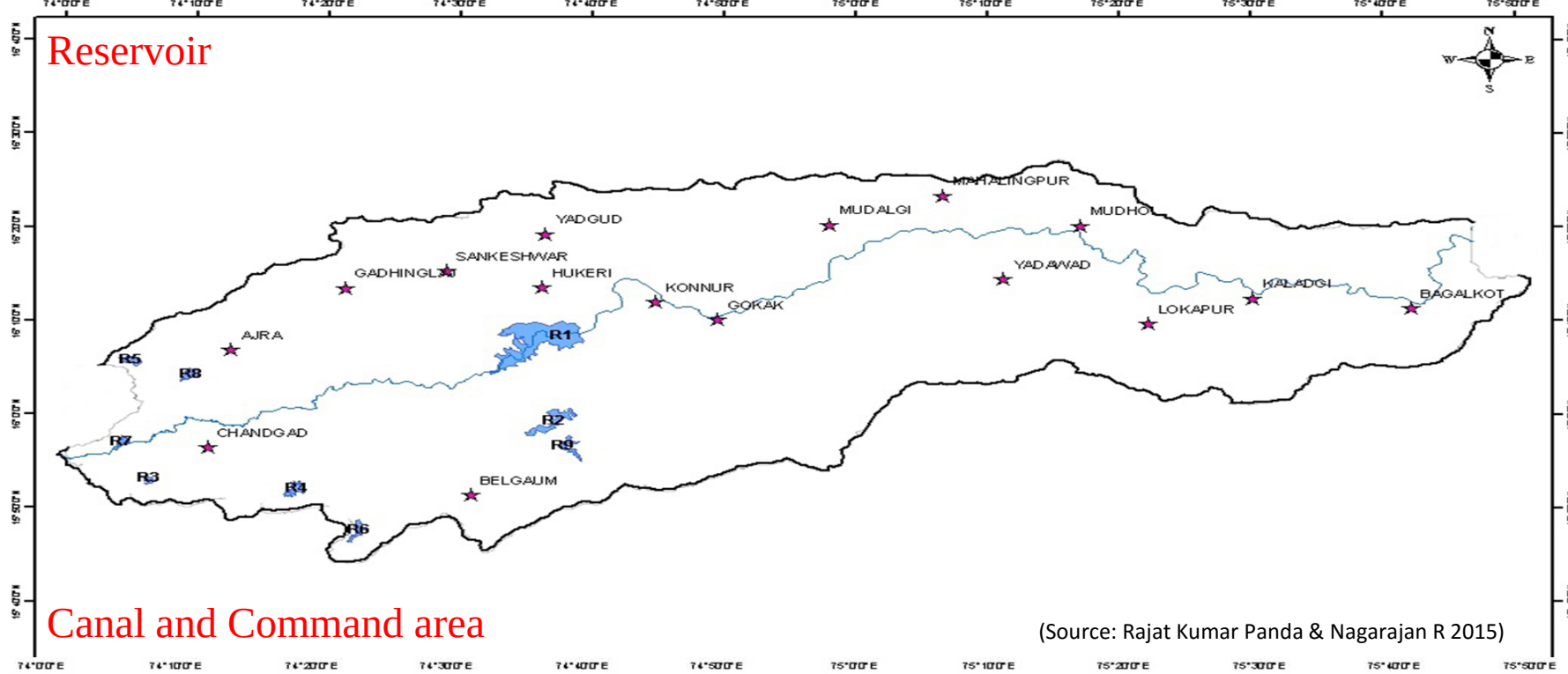
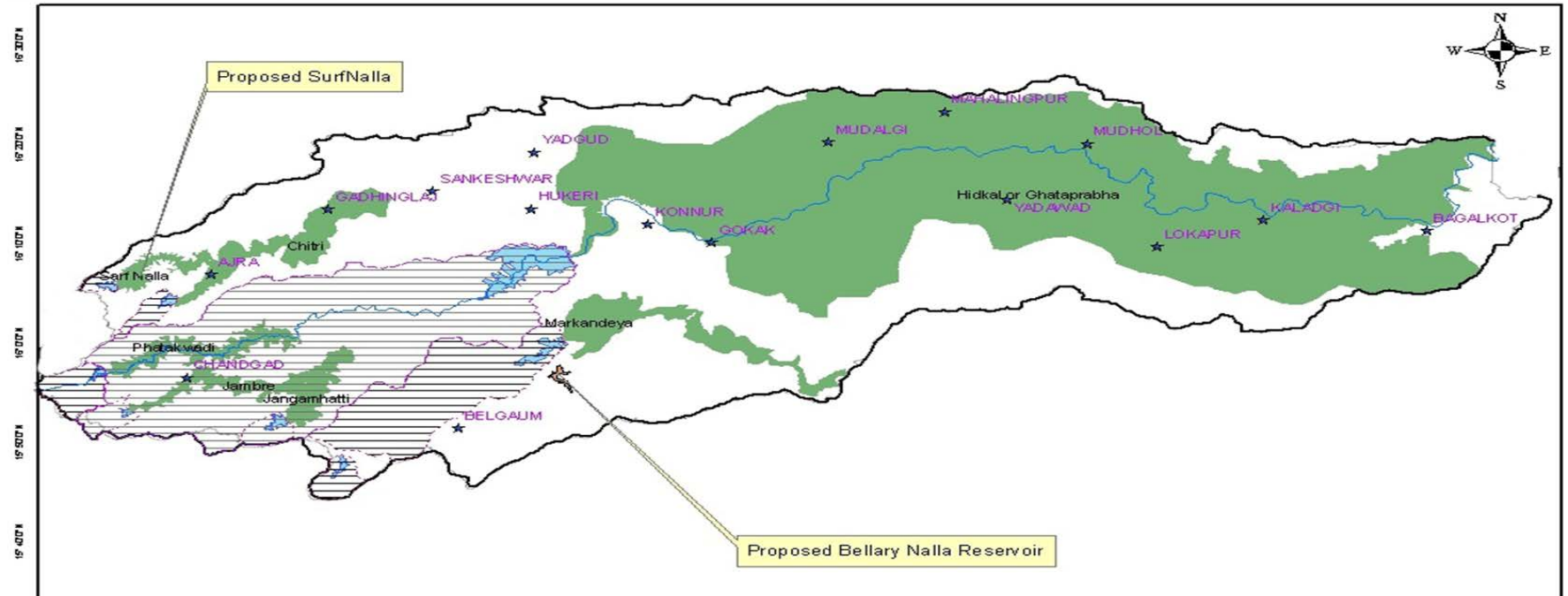
Growth of Crop Area in Command Area and Impact Climate Change

Reservoir



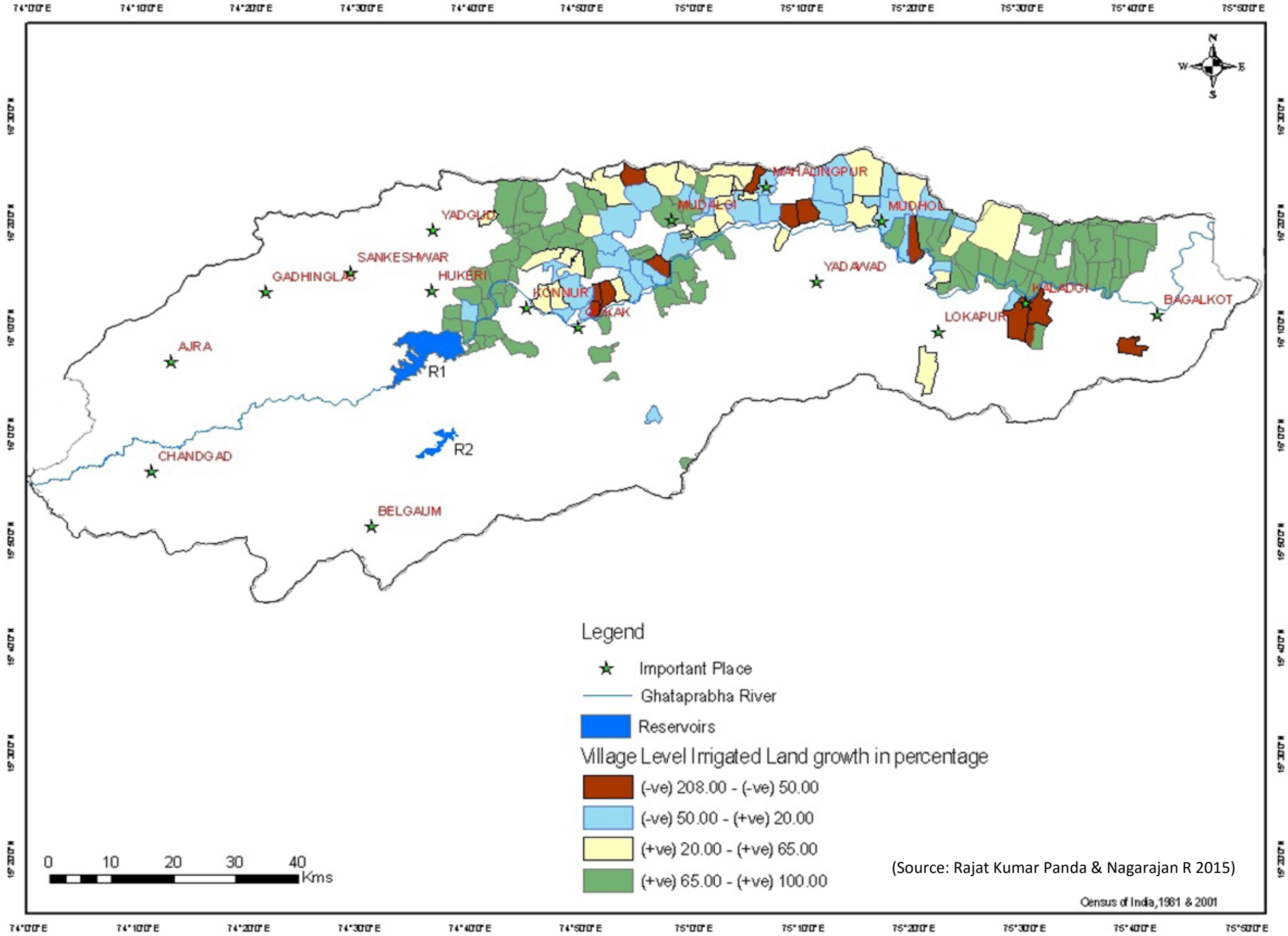
Canal and Command area

(Source: Rajat Kumar Panda & Nagarajan R 2015)



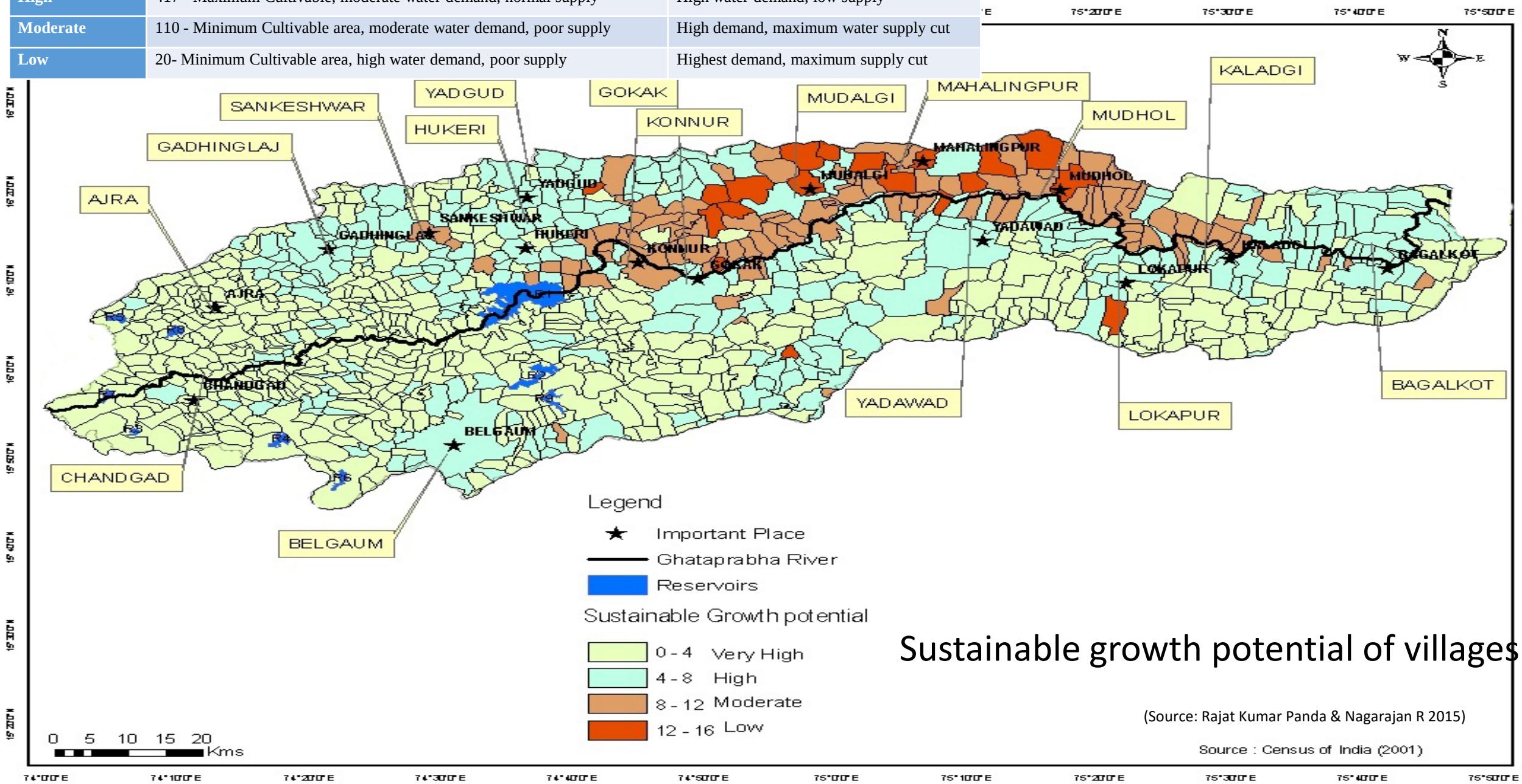
Reservoirs and their water storage

Id	Name	Location	River	Height (meters)	Catchment area (km^2)	Storage Volume (Mm^3)	Canal Length (km)	Command area (km^2)
R1	Hidkal	Hidkal, Hukeri	Ghataprabha	60	1,412	1,448.69	GRBC- 202 GLBC -191	GRBC - 1,691.29 Mm^2
R2	Markandeya	Rangdoli	Markandeya,	39.10	43.200 Ha	104.66	MLBC- 12 MRBC –80	MLBC - 8.90 Mm^2 MRBC - 182.15 Mm^2
R3	Jambre	Jambre, Chandgad taluk	Tamraparni	38.065	19.97	23.23	-------	6642 Ha.
R4	Jangam hatti	Jangamhatti, Chandgad	Honhal Nalla, Tamraparni	31.40	21.40	34.21	-------	4952 Ha
R5	Surfnalla	Khedage Parpoli, Ajra	Surfnala, Hiranyakeshi	33.33	11.88	18.97	-----	3350 Ha
R6	Rakaskopa	Rakaskoppa, Belgaum	Markandeya	20.12	33.67	16.62	Drinking	--------
R7	Phatak wadi	Chandgad	Ghataprabha	48.30	58.83	43.75)	----	7695 Ha
R8	Chitri	Rajewadi, Ajara	Chitri, Hiranyakeshi	55.11	27.85	53.414	-----	13085 Ha.
R9	Bellary nallah	Hudli	Bellary Nalla, Markandeya	36.74 -46.90	253.82	37.260	119.55	8200 Ha
R10	Dhupdal	Konnur	Ghataprabha		2797	10.49	109	1,618.80



(Source: Rajat Kumar Panda & Nagarajan R 2015)

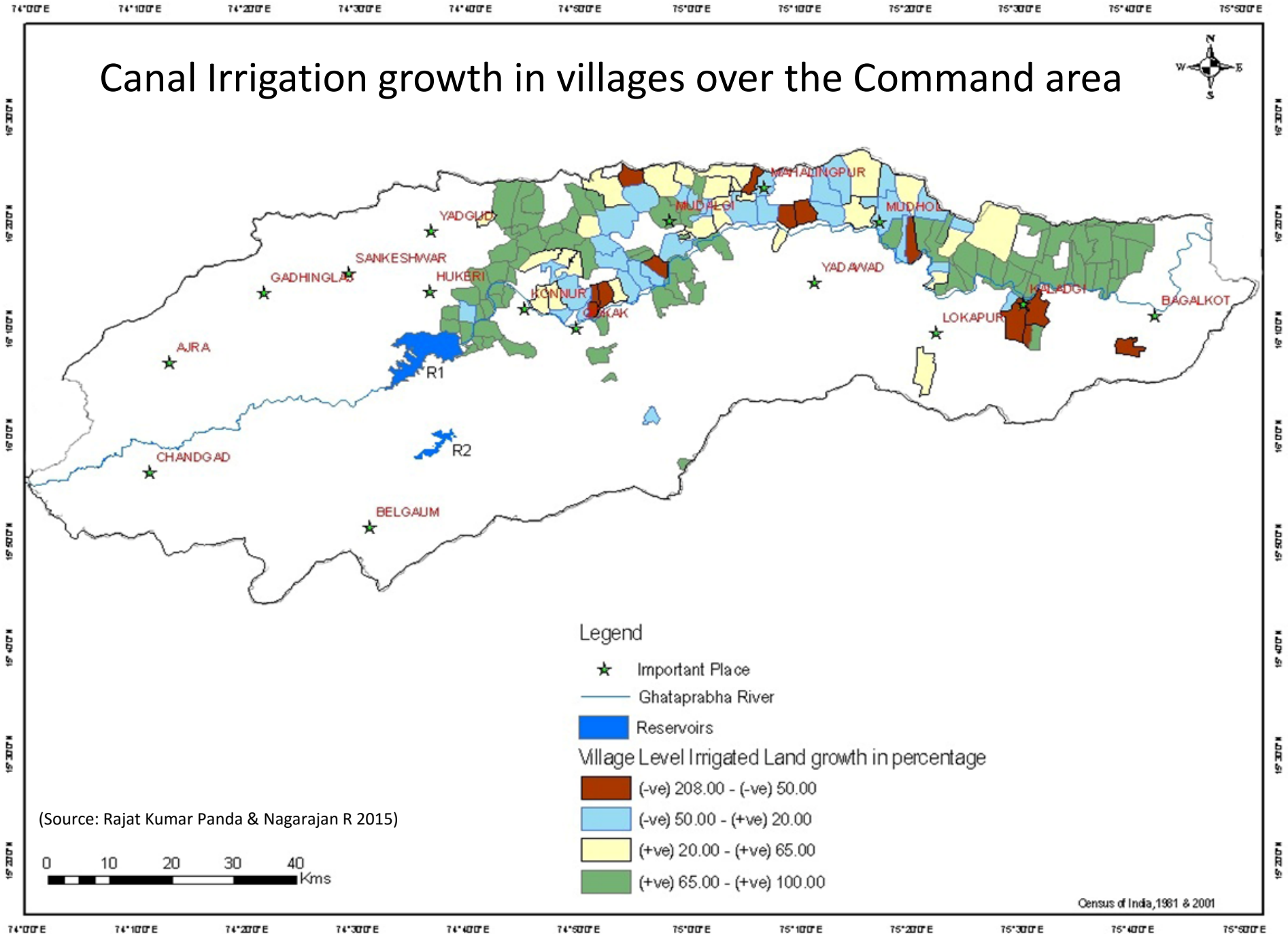
Sustainable growth potential	No. of villages and Condition	Scenario – 2040
Very high	427 - Maximum Cultivable, low water demand, normal supply	Moderate demand, normal supply
High	417 - Maximum Cultivable, moderate water demand, normal supply	High water demand, low supply
Moderate	110 - Minimum Cultivable area, moderate water demand, poor supply	High demand, maximum water supply cut
Low	20- Minimum Cultivable area, high water demand, poor supply	Highest demand, maximum supply cut



Sustainable growth potential of villages

(Source: Rajat Kumar Panda & Nagarajan R 2015)

Canal Irrigation growth in villages over the Command area



(Source: Rajat Kumar Panda & Nagarajan R 2015)

Thank you