

Inter-Linking of India's Rivers: Maximizing the benefits

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The Promise:

- Permanent solution to recurring problems of hydrological imbalance – droughts and floods
- Enable realization of India's global competitiveness and major share in agriculture
- “Mother of all climate change adaptation strategies”
- Enable integrated planning and management of surface, river, and groundwater resources
- Vehicle to remedy past distortions in water resources policy
- Can help promote broader agricultural sector reforms

However...

- Apprehensions exist with respect to potential adverse environmental impacts: e.g. increased alkali-salinization of soil, pathway for dispersal of alien biodiversity species
- There are also apprehensions of adverse social impacts – richer farmers may benefit, while the poor may be left out.
- Possible fiscal impact – estimate by the Suresh Prabhu Task Force was c. Rs. 250,000 crore. Present estimate may be much higher.
- Need to develop a financing model that will help ensure correction of distorted irrigation tariffs: PPP model with balanced risk sharing?

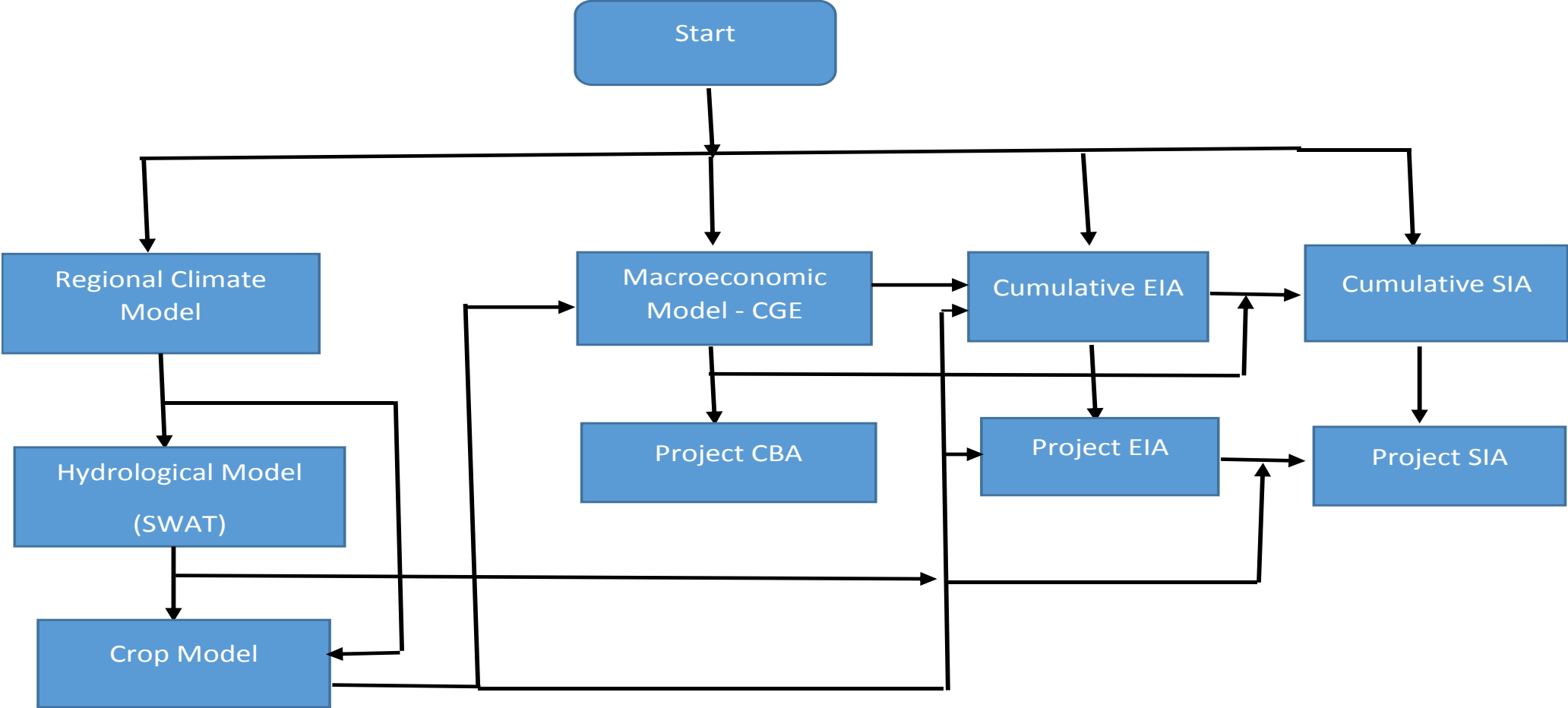
Due diligence: Integrated Impact Assessment

- Hydrological Assessment (each basin and for the country as a whole):
 - Climate modelling – impacts on precipitation and temperature, winds
 - Hydrological modelling – integrated across river, surface, and groundwater
- Crop modelling:
 - Optimal cropping patterns by region with and without ILR, climate change
- Environmental impact assessment:
 - Cumulative environmental impact assessment of the plan as a whole
 - Project level EIA of each link

Due diligence...

- Social Impact Assessment:
 - Cumulative (income distribution across social classes, impact on employment at national level, impact on land values)
 - Project level (displacement, impact on jobs at project level, impact on land values, compensation, rehabilitation)
- Economic Assessment:
 - Project level Cost-Benefit Analysis, with social discount rate appropriate to inter-generational impacts
 - Macroeconomic assessment: Dynamic (over long time period), impacts on GDP growth and per-capita income, sectoral growth, distributive impacts, impacts on international trade
- Feedback mechanisms to be incorporated

Schema of Integrated Assessment of Inter-Linking of Rivers



thank you