

DAMS AND DISPLACEMENT

Major Loss, Minor Gain

Polavaram Project in AP

The Polavaram Project was envisaged to harness the Godavari's waters for much needed irrigation purposes in the coastal areas of Andhra Pradesh and the drier Rayalaseema region. However, the project remains dogged by controversy because there has been no agreement on the area to be submerged and the rehabilitation package to be offered to the project affected people.

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The Polavaram Project is a major multipurpose irrigation project across the Godavari river at Ramaiahpet village in Polavaram mandal, West Godavari district. The project has long been in the pipeline and the proposed location is about 42 km upstream of the existing Sir Arthur Cotton Barrage at Dowleswaram and 34 km upstream of Rajamundry.

The river Godavari originates in the Sahyadri hills in Triambakeswar, Maharashtra. Pravara, Poorna, Manjeera, Maneru, Pranahita, Indravati and Sabari are important tributaries of the Godavari. Pranahita, Indravati and Sabari contribute about 70 per cent of the river flow. After the Sabari meets the Godavari at Kunavaram in Khammam district, the river traverses a narrow 250 to 275 m wide pass in the Paapi hills before it widens to 3.5 km at Rajamundry.

Sri Ram Sagar Project (SRSP) at Pochampadu and Cotton Barrage at Dowleswaram are two major already existing projects on the Godavari in Andhra Pradesh. The Polavaram project is intended to utilise about 8,500 mm³ of water out of a dependable yield of 85,000 mm³ (including surplus waters) in the river. Of the about 42,000 mm³ that is Andhra Pradesh's share, about 19,000 mm³ is diverted to various projects while about 23,000 mm³ is let off into the sea.

The project is supposed to have a full reservoir level (FRL) of 45.72 m and top

of bund level (TBL) of 53.32 m. The head works include construction of an earth-cum-rockfill dam 2.31 km in length; a powerhouse with 960 mw capacity on the left flank; a left main canal 181.5 km long; and a right main canal of 174 km.¹

Major Benefits

- (1) Irrigation water for 1.6 lakh ha in East Godavari and Visakhapatnam districts through the left main canal and for 1.28 lakh ha in Krishna and West Godavari districts through the right main canal,
- (2) generation of 960 mw hydel power,
- (3) transfer of 2,200 mm³ water to Krishna basin at Prakasam Barrage, Vijayawada,
- (4) 653 mm³ water to meet the domestic and industrial needs of Visakhapatnam,
- (5) drinking water supply for all the villages that lie on the route of the left and right main canals.

The project also involved the submergence of 42,000 ha of land in its foreshore (37,743 ha in Andhra Pradesh; 1,618 ha in Chhattisgarh; and 2,786 ha in Orissa) and displacement of 30,607 families (1,28,913 people as per the 1991 Census) in 292 villages according to the designs made during the 1980s. These were later modified and the 2003 designs are expected to reduce the submergence to 276 villages (1,17,034 people as per the 2001 Census) in seven mandals of Khammam and one mandal each of East and West Godavari districts in Andhra Pradesh. There will be no submergence in Chhattisgarh and Orissa. The table

classifies the submergence area in Andhra Pradesh.² A total of 46,929 ha (wetlands 11,782 ha, dry lands 32,667 ha and garden lands 2,481 ha) has to be acquired on account of submergence/canal construction. The original project was estimated to cost Rs 12,234 crore going by the rates in 2001-02. The revised proposal is estimated at Rs 8,198 crore according to 2003-04 rates with a project benefit cost ratio of 2.4:1. The modified design lowers the crest level of the spillway for peak discharge in order to avoid interstate submergence.

In August 2004, the government proposed extending the left canal by 100 km to irrigate an additional 3.2 lakh ha in Vizianagaram and Srikakulam districts.³

A Jinxed Project

The Polavaram project was conceived in the 1940s. Initially it was called the Rama Pada Sagar Project and was originally supposed to be constructed across a narrow river section at Paapi Hills. Later, the project was shelved because of the huge costs involved in laying the foundation in the absence of shallow hard rocks at the proposed dam site.

Fresh investigations about the viability of the project began in 1977 and interstate agreements were signed by 1980. By 1985, detailed proposals had been prepared to construct a dam at Polavaram but the plan could not be implemented since clearance from Congress Working Committee (CWC) and various ministries of the government of India was not obtained. The chart shows the chronology of events relating to the project.

Going Under

The problem is the magnitude of human displacement and submergence. The project displaces 1,17,034 people in 276 villages besides submerging 37,743 ha of land – of farmland, forests and wasteland. The livelihood and habitation of many tribal and poor people are at risk.

The major dimensions of this conflict are as follows:

(1) Construction of the dam will lead to the displacement of an enormous number of people. Rehabilitation is a Herculean task because of the large-scale submergence. (2) Clearance from CWC, ministry of Environment and Forests, Ministry of Tribal Welfare and the Planning Commission will be difficult because of the controversy surrounding the vast submergence of

forest and farmlands, a low benefit-cost ratio, and the loss of livelihood.

(3) Environmentalists and social activists are sceptical about the sincerity of the state government. AP has a poor record in implementing rehabilitation programmes in projects like Yeleru, Kovvada, Surampalem, Nagarjuna Sagar and Sri Ram Sagar, etc.

(4) There is bound to be a loss of biodiversity and wild life and submergence of graphite mines leading to water pollution and loss of aquatic life; not to mention the submergence of heritage.

(5) Sedimentation and silt deposition in the Godavari delta is reportedly high. The lifespan of the project itself is in question if silt deposition continues at the current rate.

(6) Though the government of Andhra Pradesh came out with a resettlement and rehabilitation policy in April 2005, no consultations were held with the people from the submergence area. To add to the scepticism the annual budget allocation of Rs 300 crore for the year 2004-05 does not explicitly mention rehabilitation activities.⁴

(7) Andhra Pradesh has to part with 992 mm³ water – intended for Karnataka and Maharashtra – in lieu of transferring 2,267 mm³ water from the Polavaram project to the Krishna River as per the Bachawat Award of 1976. Therefore, the net gain from the inter-basin transfer is only 1,275 mm³.

(8) Gram panchayats and local mandal parishads do not have any information about the extent of submergence or what government plans have in store for them. People assume that submergence levels will match the 1986 floods.

(9) People have been protesting against the dam and want to know why their life and livelihood should be sacrificed to benefit the people of coastal regions, who are economically better off.

Pressing Ahead

Polavaram came into the limelight owing to the Andhra Pradesh government's renewed interest in the project in early 2004. Despite the lack of clearance from central government agencies and ministries, the chief minister went ahead with the foundation stone ceremony for the construction of the right main canal on November 8, 2004 and the endeavour was renamed the

Indira Sagar Project. The state government has been negotiating with the Austrian government for financial support to the project. The Polavaram project has top priority, second only to the Telugu Ganga and Devadula projects, as far as budget allocation goes and Rs 300 crore has been set aside for the year 2004-05.

The people of the submergence villages are deeply anguished at the recent developments. But they have neither managed to organised themselves nor do they understand the larger implications of displacement. They only wish for a good rehabilitation package in case submergence is inevitable.

Disaster Preparedness Network (a group of 27 local NGOs), inspired by Manya Praanta Chaitanya Yaatra of 1991, has been fighting for the cause of the project affected people in seven mandals of Khammam district since August 2004. The network constituted all-party committees at the mandal level and chalked out action programmes to raise awareness among the people on the impact of the project on their lives and environment.

The network helped all the panchayats in the nine submergence mandals of Khammam district to pass resolutions against the construction of the project and also conducted a field survey on loss of resources and livelihood in three villages. The group is now making efforts to negotiate with the government on behalf of the villagers for effective rehabilitation prior to construction.

Different Strokes

Government and technical experts argue that:

(1) There is plenty of surplus waters in the Godavari that can be harnessed effectively by constructing projects such as Devadula, Dummugudem and Polavaram to increase irrigation potential and serve the drought-prone regions in the state.

(2) The Polavaram project will not only provide irrigation water to about 2.88 lakh ha, but will also offer multiple benefits in terms of electricity generation, industrial and domestic water supply to villages and cities along the canals.

(3) The transfer of 2,267 mm³ water to the Krishna basin at Prakasam Barrage will

Table: Submergence Area in Andhra Pradesh

Wet	Dry	'Poramboke'	Forest	Total
398 ha	22,218 ha	11,941 ha	3,186 ha	37,743 ha

enable diversion of water from Srisailem and Nagarjuna Sagar to the drought-affected Rayalaseema region.

Social activists and concerned citizens are of the view that: (i) Other alternatives should be explored in light of the huge environmental and social damage due to submergence; (ii) the government should plan a project that involves minimum submergence; and (iii) alternatively, the government should have an effective rehabilitation package in place and implement it before the construction of dam.

Need for a Rethink

The state government's intention to effectively use the surplus water of the Godavari is laudable. Indeed water needs to be efficiently harnessed by planning appropriate irrigation projects.

At the same time one cannot deny that the Polavaram project as it stands today involves human displacement and environmental destruction on an unprecedented scale. 276 villages in nine mandals, predominantly populated by poor and neglected people stand to be submerged; all of this is meant to benefit the relatively better-off region of coastal Andhra Pradesh where it will irrigate 2.88 lakh ha. The only exception is the backward area of Rayalaseema that will definitely benefit from the transfer of 2,267 mm³ water (net gain 1,275 mm³) to the Krishna Basin.

Therefore the government really needs to explore alternative means to achieve these ends in a manner that is people-friendly and environmentally sound. The mid-Godavari basin, for example, not only has a good water yield but is also suitable for locating projects that will benefit the backward Telangana region. The government should keep in mind two essential concerns: (i) any alternative plan will have to prioritise minimum submergence and (ii) such a project should benefit the poor and backward regions of the state. ■■■

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Notes

- 1 Annual Report 2003-04, Irrigation and CAD Department, Andhra Pradesh.
- 2 *Polavaraaniki Punaadi – Girijana Prantaaniki Jalasamaadhi*, SAKTI, Hyderabad (October 2004).
- 3 *Polavaram – Marantha Vistharana* – Andhra Bhoomi, August 24, 2004.
- 4 'Higher Allocations for Irrigation Projects' – news article in *Hindu*, February 20, 2005.