



INTERSTATE AGREEMENT DISPUTE AND CLAIMS ON ANTICIPATED LOSS OF ODISHA DUE TO POLAVARAM PROJECT

Dr. Satyabrata Mishra* **Dr. Pradeepta Kumar Mishra****

**Associate Professor & HOD in PG Department of Economics, Vikram Dev Autonomous College, Odisha.*

***Lecturer in Economics, Dr. Shyama Prasad College, Odisha.*

Introduction

The Polavaram Project was envisaged by the British Government in 1941. But after independence there was an inter-state agreement in between the Governments of undivided Madhya Pradesh, Andhra Pradesh and Odisha in 1974-75. At that time Polavaram was stopped due to its multi-dimensional affect on economic, ecological and social fabric (Sambad 25th August, 2010).

It is evident that, there was a Resolution passed for the construction of Irrigation Project and submitted to the Central Government for the aggregate welfare of Andhra Pradesh, Odisha and Madhya Pradesh. It was stopped due to its financial constraint and planning. In 1980 the Central Water Commission (CWC) had discussed with the three Governments viz, Andhra Pradesh, Odisha and Madhya Pradesh and had passed a Resolution for the construction of this Project. But in 1987 the Union Environment and Water Resource Department rejected the plan and did not approve the forest and environment clearance to the Project. Now, the Andhra Pradesh Government could manage the necessary clearance for its most ambitious Project and recognized the Project as a National Project. It has always been involved in controversy since its inception. Andhra Pradesh Government intends to accrue pecuniary benefits at the expense of expropriation of local residents affected by Polavaram Dam Project.

Objective and Methodology

The present study intends to pursue the following objectives,

1. Firstly, to analyse the Interstate Agreement Disputes relating to construction of Polavaram Dam Project.
2. Secondly, to assess the parameters of loss incurred due to construction of Polavaram Dam Project.
3. Thirdly, to study the extent of anticipated loss caused due to submergence of villages in Odisha affected by Polavaram Dam Project.
4. Fourthly, to analyse policy implications for rehabilitation/displacement of people affected by submergence of region due to Polavaram Dam Project.

The study is empirical based. Both primary and secondary data are processed and verified to deduce the inferences. The methodology here is analytical and descriptive.

Interstate Dispute: Claims and Counter Claims

The Project came to limelight by the Ministry on 25th October 2005 and was not objected at that time. In October 2006 the Andhra Pradesh Government discussed details with Saifuddin, the then Minister of Water Resources at his tour to Hyderabad who approved the project as a National Project without any discussion with the Government of Odisha and Madya Pradesh. The project was decided to inter link with Krishna to Godavari at that time. This decision of Central Government is baffling the State of Odisha and Chhatisgarh. To oppose the Project there was a Resolution passed in the Odisha Legislative Assembly unanimously on 18th November 2006.

The Government of Odisha filed in the Apex Court on 2009 expecting a sprawling submergence due to the construction of this Project. The Apex Court had accepted the suit and looking into the plea of Odisha against the Project. The suit filed by the Odisha Government for seeking suspension of Polavaram Project. It was discussed by Central Water Commission (CWC) and the Godabari Water Dispute Tribunal (GWDT), established in 1980 for an amicable settlement of polemic issues of submergence. The Centre noted that the Environment and Forest Ministry had accepted the Project proposal in January 2009 instructing Andhra Pradesh Government to ensure that there was no submergence of any habitation or forest area in Odisha and Chhatisgarh.

A Judicial Committee (Khandapitha) was formed by Chief Justice K.G.Balkrishnan, Justice Abhijit Pasayat and Justice S.K.Kapadia, pending the decision and ordered the Andhra Pradesh Government to take for permission from Ministry of Tribal Affairs about its rehabilitation and resettlement for further discussion. At the time of this hearing, the reservoir will be expected to submerge partly 1,93,000 families out of which 6,316 are in Odisha and 11,766 in Chhatisgarh. With an assurance from the then UPA Government at the Centre (The New Indian Express, 2010).



The Centre asked Andhra Pradesh to furnish a confirmation Report not to change the number of Project affect Schedule Tribe families which was reported at the time of clearance of the relief and rehabilitation. All necessary steps had been taken to prevent submergence. The Odisha Government appealed the Central Water Commission (CWC) for not furnishing properly any details before approving the Project. The Union Ministry of Environment and Forest Department recommended and suggested to construct an enormous embankment of 30 Kms long on both the sides of river Sabari and Sileru on January 2009 which is not declared at its approval time on 25th October 2005. (Sambad 5th Sept 2010).

Condemning the Centre for granting approval without informing Odisha, it is pointed out that the Project was fraught with the serious consequence of submergence and an adverse environmental impact on Odisha. It appealed to the then Prime Minister Dr. M.M.Singh seeking withdrawal of the clearance granted on 28th July, 2010. If the embankment will be constructed on both the side of river Sabari and Sileru thousands of people will be affected and the condition will be worst in rainy season.

The Odisha Government moved the Supreme Court seeking a stay on the final approval granted by the Union Environment and Forest Ministry for Indira Sagar National Project (Polavaram) and a direction for status quo. In response to Odisha's suit, the Centre Justified the grant of clearance for execution of the Project. The Government of Odisha argued that when 2009 approval was still pending in the Apex Court the grant of the final approval on the same condition would be contravention of Supreme Court's orders (The New Indian Express, 2010).

Visualising Odisha's extrapolation of submergence due to flood, the Probable Maximum Flood (PMF) estimated for the Project was 141435 cusec (about 50 lakh cusec). The proposed Spillway was capable for disposing of the Probable Maximum Flood (PMF) and Dam safety had been checked for this condition. By drawing a distinction between the original and revised proposals, Andhra Pradesh Government alleged that Odisha entered into the 1980 agreement with Andhra Pradesh based on the maximum discharge of 36 lakh cusec but the plea of the Andhra Pradesh Government to the Union Ministry of Environment that the backwater would not be troublesome upto 182 feet for a discharge of 36 lakh cusecs (The Hindu Sept.2010).

Table 1: Loss of Odisha declared by Andhra Pradesh Government over the periods apropos of letters to the Central Government

Year	Contour (in Feet)	Submerging Village	Loss of land (Hect)
1978	150	7	-
1997	179.85	7	1026
1999	182	10	2119.38

Source Malyabant Dastabij 2007

It is construed from the above table-1 that as per the interstate agreement the highest water level will be 150` declared by the Andhra Pradesh Government, where only some villages will be submerged. It is decided in 1997 that the height of the Dam will be 179.85 feet where only seven villages of Odisha with 1026 Hect. of land will be submerged. But on 4th July 1999, the Andhra Pradesh Government had decided to enhance the height of the Dam to 182` where 10 tribal villages covering 2119.38 Hect. of land will be submerged. (Pradhan,2007). But, according to the Odisha Government, the Polavaram Project would submerge 9667.1332 Hect. of land with 15 Revenue Villages and 10 Hamlets in Motu Tahasil of Podia Block in Malkangiri District. Out of 6,818 people, 5916 tribal people will be displaced due to the establishment of the Project. The proposal to construct an embankment to prevent the affected villages of Odisha from its submergence tend to be unrealistic. The proposed embankment of 30 kms long and 45 feet high inside Odisha is a polemic issue on the ground of its land acquisition, environmental and ecological impacts. An intricated question also arises about its rain water and flood water at the time of rainy season if the embankment will be built. Odisha become discontented with the clearance from Environment Ministry to Polavaram Project.

There were records of several flood devastation seen in Sabari and Sileru catchment area in Odisha and Chhatisgarh. In August 2006 the flood damage was high and the amount of property and life lost in a water level of 145 feet in Sileru and Sabari catchment area. The Andhra Pradesh Government decided to construct the Dam of a height 182 feet where majority area of Malkangiri District of Odisha will be submerged under the Dam Project.

Recalcitrant demand for immediate cease down of work on the Indira Sagar National Project on river Godabari in Andhra Pradesh was made by BJD in Lok Sabha. Bhatruhari Mahatab, a BJD Party leader alleged that the views of Odisha were not considered by the Tribal Affairs Ministry before giving rehabilitation and resettlement clearance. He also alleged that Chhatisgarh, which is also affected, was not being consulted. The BJD MLAs including the Ministers submitted a Memorandum to the Honorable President Pranab Mukherjee through the Honorable Governor S.C.Jameer opposing the release of Rs.345



crores for the construction of the Project. BJD protested against Polavaram Project inside the Assembly on 12th December, 2015. Debi Prasad Mishra, the Minister of Industries of Odisha Legislative Assembly has protested to renunciate the Project and makes the Environment Department clearance null and void.

On this backdrop, Anti-Polavaram Movement has been intensified not only in Odisha but also in Chhattisgarh and Andhra Pradesh. Environmentalists, social workers, NGOs, tribal leaders and local people revolted against the project by realizing multi-dimensional devastation. They have the contention that the purpose of Dam construction is to obtain the effectiveness of Dam by considering its contribution to the area where it will be constructed. It needs to execute the investigation carefully. The large scale cost for its construction may lead to development to destruction. By anticipating the design and safety of the Dam, involuntary displacement, forest depletion and environmental issues many environmentalists and political leaders vowed against the then UPA Government at Centre by supporting the Government of Odisha. The Anti-Polavaram leaders have the opinion that before constructing a Large Dam, Government should think about organic link between the forest and the life of the tribals. Preservation of forest and Minor Forest Produce for the tribal livelihood, steps to protect the indigenous tribal knowledge of plants and their uses should be the highest priority of the Government.

Parametres of loss in Malkangiri District of Odisha due to Indira Sagar National Project (Polavaram)

Indira Sagar National Project (Polavaram) is a Mega Project which is supposed to submerge a vast area of Motu Tahasil at the convergence of Mugi Point of river Sileru and Sabari. It is also expected that 50 thousand people will loss their houses in the border area of Chhattisgarh, Odisha and Andhra Pradesh. The paper intends to verify the Project loss in the District of Malkangiri of Odisha in various ways. The main loss of the Project is its fertile land, forest and irrigated cultivable lands. The area is developed to some extent by the Potteru Irrigation Project (PIP) which supplies water to the cultivable lands. It will affect the ayacut area of Potteru Irrigation Project (PIP) and its canal system by the establishment of Indira Sagar National Project (Polavaram) in Malkangiri District. The other developmental Projects carried out by the District Administration in this area will be devasted by the costruction of this Project.

Expected Forest loss in Odisha due to the Project

Operationalisation of the Project will cause denudation of the forest area in Odisha. Due to the submergence of the Project sprawling forest land of 9667'1332 Hect. will be devasted.

Table 2: Expected forest loss due to the Polavaram Dam Project in Malkangiri District of Odisha

S. No	Name of the forest area	Amount of forest loss (in Ha.)	Range Office	Block	Tahasil	Ranking of Forest loss
1	2	3	4	5	6	7
1.	Motu Reserve forest	665.1303	M.V.79	Podia	Motu	4
2.	Poleru Reserve forest	401.3557	Kalimela	Kalimela	Kalimela	5
3.	Tadimetla Reserve forest	3685.1477	M.V.79	Podia	Motu	2
4.	Guda Reserve forest	3965.4676	M.V.79	Podia	Motu	1
5.	Katanpalli Reserve Forest	950.0319	M.V.79	Podia	Motu	3
	Total	9667.1332				

Source: Compiled from Primary Survey Sambad 25th August- 2010, wednesday, Jeypore Edition

From the above Table-2, it is construed that Guda Reserve Forest has the largest loss of forest area and Poleru Reserve Forest has the minimum loss of forest area due to submergence caused by enhanced height of Polavaram Project.

Expected Land Loss and Population affected in Odisha due to the Project

Motu Tahasil is having greater concentration of tribal villages and abundance of forest resources. With an estimation by Potteru Irrigation Project (PIP) Engineers the area affected would be in contour of 150',182' and 220' height of the Dam has been reflected here.

Table 3: Area, village and population to be affected in Odisha with a contour of 150' height of Polavaram Dam. (Population as on April 2017)

S. No	Affected village	Affected Population	Affected Land (in Hect.)
1	2	3	4
1.	Motu (Partially)	964	537
2.	Baribanchha (Fully)	13	
3.	Total	977	537

Source: Compiled from Primary Survey and Potteru Irrigation Project (PIP) Report Submitted to Government of Odisha



Table-3 shows that with a contour Dam height of 150' two villages like Motu and Baribancha with 977 people and 537 Hect. of land will be affected fully or partially.

Table 4: Area, village and population to be affected in Odisha with a contour of 180' height of the dam. (Population as on April 2017)

S. No	Affected village	Households	Affected Population	Affected Land (in Hect.)
1	2	3	4	5
1.	Motu	260	964	296.741 (Approximately)
2.	Baribanchha	4	73	
3.	Binayakpur	131	524	
4.	Alma	111	445	
5.	Muraliguda	130	538	
6.	Madiguru	52	224	
7.	Kattaguda	66	332	
8.	Petta	149	609	
9.	Total	903	3709	296.741 (Approximately)

Source: Compiled from Primary Survey and Potteru Irrigation Project (PIP) Report submitted to Government of Odisha

The above table-4 reveals that about 3709 people in eight tribal villages of Motu Tahasil with 296.741 Hect. of land will be submerged with a contour Of 180' height of the Dam.

Table 5: Information about the Hamlets affected in Motu Gram Panchayat due to the Project. (Population as on April 2017)

S. No	Affected Hamlets	Name of the river	Distance from river (Km)	Households	Affected Population
1	2	3	4	5	6
1.	Redipal	Sileru	0	18	72
2.	Laxmanguda	Sabari	1	10	49
3.	Kamalapuram	Sileru	0	52	268
4.	Lachhipuram	Sabari	1	38	186
5.	Tretriguda		0	07	29
6.	Total			125	604

Source: Compiled from Primary Survey

The study has not incorporated the hamlets in Motu Panchayat. In the above table-5 where 125 households of 604 population will also be affected with 180' height of the Dam .

Table 6: Area, village and population to be affected in Odisha with a contour of 220' height of the dam. (Population as on April 2017)

S. No	Affected village	Household	Affected Population	Affected Land (in Hect.)
1	2	3	4	5
1.	Motu	260	964	9667.1332 (Approximately)
2.	Baribanchha	4	73	
3.	Binayakpur	131	524	
4.	Alma	111	445	
5.	Muraliguda	130	538	
6.	Madiguru	52	224	
7.	Kattaguda	66	332	
8.	Petta	149	609	
9.	Gorsapalli	41	117	
10.	Total	944	3826	9667.1332 (Approximately)

Source: Compiled from Primary Survey and Potteru Irrigation Project (PIP) Report submitted to Government of Odisha



If the contour height of the Dam will be 220' than 944 households with 3826 people and 9667.1332 hect. of land will be affected (Table-6). The people live in the Hamlets of Motu Gram Panchayat will come under submergence.

It is revealed that 1069 households having only tribal 4430 people will be affected due to this Project. It is found that 6 tribal villages in Malavaram and Pusuguda Gram Panchayat excluded in the study, located adjacent to river Sileru and Sabari will also be affected by the Project. As per empirical obserbation about 5616 tribal people only will be displaced by including Malavaram and Pusuguda Grama Panchayat. A deciduous rain dense forest of Odisha with an amount of 9667.132 Hect. will be submerged under Polavaram Project. The study also revealed that a total of 6700 tribal and non tribal people will be victimised partly or fully due to the Project. It is seen that a total of 879 households with 3643 population only in Motu Gram Panchayat where 98 Scheudle Caste population and 601 Other Caste population with 27 and 130 households respectively will be affected by this Project.

Expected Irrigated Land Loss of Odisha due to the Project

Irrigation holds a key for augmenting agricultural productivity and production and provides livelihood support in the tribal areas. Irrigation facilities in different Gram Panchayats in the District cater agricultural development have provided development since a long time.

Table 7: Expected Irrigated land loss of Odisha in contour of 150',182' and 220' height of the dam

S. No	Contour Height (in feet)	No. of affected village	Affected irrigated land (in Hact.)
1	2	3	4
1.	150	2	Nil
2.	182	8+5 Hamlets	296.741
3.	220	9+5 Hamlets	839

Source: Compiled from Primary Survey and Potteru Irrigation Project (PIP) Report Submitted to Government of Odisha

Potteru Irrigation Project has been providing water since 1999 by Gompakonda Main Canal (GMC), Tamasa Main Canal (TMC) and Motu Branch Canal (MBC) in the District. Now the main canals, minors, sub-minors and distributaries are providing water to 55,000 Hect. of cultivable land in the District. If Polavaram Dam Project will come to real State then it will destroy 6.5 Km Motu Branch Canal System of Potteru Irrigation Project (PIP) in the area. The affected irrigated area due to the Project is 296.741 Hect. of land in 182' height and 839 Hect. of land in 220' height. The Table-7 gives the details of affected irrigated land in the area.

Nature of Loss of Transportation, Communication and Infrastructure

An efficient transport network plays a crucial role in enhancing the productivity and efficiency of the economy, besides promoting development of backward areas. A vast and varied transport network and an efficient communication system are basic prerequisites for rapid economic development and sustained growth process of developing economy. The area is facilitated with a good road network of village roads and Vijayawada-Ranchi National Highway corridor will be devastated after submergence. Telephone services and BSNL towers will be adversely affected. The other infrastructure will be affected is mentioned in the table-8.

Table 8: Anticipated loss of infrastructural facilities in the villages after the submergence of the Project

S. No	Name of the village	Road	Electricity	Hospital/Me dical	School	Anganwadi Centre	Telecommun ication	Postal & Banks	Other Facilities
1	2	3	4	5	6	7	8	9	10
1	Motu	Pucca and colony road	Electricity	PHC, HWF,ASH A &HWM	UP, ME & HS	Anganwadi Centre	BSNLTo wer	Branch post Office & KPG	Tahasil, & pS withBSF Camp & PIP Irrigation Office
2	Alma	Kachha Road	-	ASHA &HWM	UP,	Anganwadi Centre	Anganwadi Centre	-	-
3	Binayakpur	Pucca and colony road	Electricity	PHC, HWF,ASH A &HWM	UP, ME & HS	Anganwadi Centre	BSNLTo wer	-	-
4	Kataguda	Pucca and colony	Electricity	PHC, HWF,ASH	UP, ME & HS	Anganwadi Centre	BSNLTo wer		



		road		A &HWM					
5	Kamalapuram	Pucca and colony road	Electricity	PHC, HWF,ASH A &HWM	UP, ME & HS	Anganwadi Centre	BSNLTo wer		
6	Laxmanguda	Pucca and colony road	Electricity	PHC, HWF,ASH A &HWM	UP, ME & HS	Anganwadi Centre	BSNLTo wer		
7	Lachhipuram	Pucca and colony road	Electricity	PHC, HWF,ASH A &HWM	UP, ME & HS	Anganwadi Centre	BSNLTo wer		
8	Muraliguda	Pucca and colony road	Electricity	PHC, HWF,ASH A &HWM	UP, ME & HS	Anganwadi Centre	BSNLTo wer		
9	Mukanpally	Pucca and colony road	Electricity	PHC, HWF,ASH A &HWM	UP, ME & HS	Anganwadi Centre	BSNLTo wer		
10	Pinamadguru	Pucca and colony road	Electricity	PHC, HWF,ASH A &HWM	UP, ME & HS	Anganwadi Centre	BSNLTo wer		

Source: Compiled from Primary Investigation

Impact on Education after submergence in the area

Education is the engine of growth and is accelerated in the post globalization era where knowledge revolution has emerged. In the changing scenario education needs to expand qualitatively and quantitatively. Education is an important instrument of transmission of culture, tradition custom and most important factor is accumulation of knowledge. Education constitutes the pivot which upgrades economic development and inject social change among the people in the society. Education provides impetus to other aspects automatically and activates and the path of progress. No doubt, a long time is needed to achieve the goal but once it is picked up means miracle will start (Sharma, R.P.2011).

Table 9: General Information about the school and the students

S. No	Name of the village	Name of the school	Student Category STs	Student Category SCs	Students category (Others)	Total Students
1	2	3	4	5	6	7 (4+5+6)
1	Motu(A)	Madhusudan H.S.	51	38	45	134
2	Alma	N.P.S. Alma	18	13	-	31
3	Binayakpur	P.S. Binayakpur	06	05	-	11
4	Kataguda	P.S.&M.E. Bariabanchha	20	24	-	44
5	Kamalapuram	N.P.S. Kamalapuram	12	15	-	27
6	Laxmanguda	N.P.S. Laxmanguda	09	11	-	20
7	Lachhipuram	N.P.S.Lachhipuram	08	19	-	27
8	Muraliguda	P.S. Muraliguda	15	16	-	31
9	Mukanpally	N.P.S. Mukanpally	13	09	-	22
10	Pinamadguru	N.P.S. Pinamadguru	12	15	-	27
11	Motu(B)	Motu U.P & M.E School	76	79	21	176
Grand Total			240	244	66	550

Source: Compiled from Primary Investigation Note: The table excludes 0-4 Age Group

Most of the tribal students are receiving education from their schools located adjacent to their villages. It is evident that all most all the villages are facilitated with Primary Education.(Table-9) From the Primary Survey, it is visualised that most of the tribal people are illiterates but after the implementation of Sarva Sikhya Abhijan the students strength are gradually increasing in all the schools. But now some tribal people took their children far away from their locality and admits them in other school for study due to panic of the submergence of their village.

Anticipated Economic Impact Among the Tribal People after the Project

The submergence of the Project will create troubles in many ways among the tribal people. A panic has been accentuated among the local people in the area. It is predicted that the income of the tribal people will greatly be affected.



Table 10: Annual Income of Tribal People from Agriculture (Quintals @ \$ 1100)

S. No	Income Range	Average Land Occupied (Hects)	Average Agricultural Production(in Quintals.)	Average Revenue (in Rs.)	No. of Households
1	2	3	4	5	6
1	Below 20,000	1.06	2.01	2211	326
2	20,001-40,000	2.26	5.13	5643	301
3	40,001-60,000	3.74	7.32	8052	74
4	Above 60,001	6.13	14.16	15576	21
Total				4629.19	722

Source: Compiled from Primary data

From Table-10, it is evident that 21 households having an income of above Rs.60,001 is an average of 6.13 Hect. land produce agricultural yield of an average of 14.16 Qlts which accrue average revenue of Rs. 15,576 where as 326 households having annual income of below Rs. 20,000 with an average of 1.06 Hect. of land area produce an average of 2.01 Qlts. accrue average income of Rs. 2211.

Table 11: Annual Income of Tribal People from Forest Produce

S. No	Income Range	Average Revenue of Mahua Flower (Rs.8/Kg)	Average Revenue of Mahua Seeds (Rs.15/Kg)	Average Revenue (Tendu Leafes)	No. of Households
1	2	3	4	5	6
1	Below 20,000	720.12	420.24	225.54	326
2	20,001-40,000	945.11	721.42	322.51	301
3	40,001-60,000	2015.15	1540.43	1200.13	74
4	Above 60,001	4320.16	2500.55	3700.42	21
Total		1061.33	721.12	466.92	722

Source: Compiled from Primary data

Table -11 reveals that 21 households having income range of above Rs. 60,001 earn average revenue of Rs. 4320.16 from the proceeds of Mahua Flower, Rs. 2500.55 from the proceeds of Mahua Seeds and Rs. 3700.42 from the proceeds of Tendu Leaves where as 326 households having income range of below Rs. 20.000 earns an average of Rs.720.12 from the proceeds of Mahua Flower, Rs. 420.24 from the proceeds of Mahua Seeds and Rs. 225.54 from the proceeds of Tendu Leaf.

Table 12: Annual Income of Tribal People from Other Sources (In Rs.)

S. No	Income Range	Average Revenue(Livestock)	Average Revenue (Social Forestry)	Average Revenue (Labour Card)	Income From Other Sources	No. of Households
1	2	3	4	5	6	7
1	Below 20,000	240.12	120.24	350.54	225.54	326
2	20,001-40,000	351.72	240.12	322.12	1200.45	301
3	40,001-60,000	240.88	250.35	615.55	9034.11	74
4	Above 60,001	361.22	150.32	250.50	18421.32	21
Total		3774.54	180.27	180.27	2067.16	722

Source: Compiled from Primary data

From Table-12, it is revealed that 21 households having income range of above Rs. 60,001 earn average revenue of Rs.361.22 from Livestock Rs.150.32 from Social Forestry Rs.250.50 Labour Card and Rs. 18421.32 from other sources



whereas 362 households having income range of below Rs. 20,000 earn average revenue of Rs. 240.12 from Livestock, Rs. 120.24 from Social Forestry, Rs. 350.54 from Labour Card and Rs.225.54 from other sources.

The development among the tribal villages are far better then 12 years back by the implementation of plans and policies with special assistance of the State and Central Government's sponsored KBK and BKBK Programmes. So this will be a great loss of Odisha and a hindrance in development of tribal people after the implementation of Polavaram Dam Project. **Conclusion**

The Polavaram Dam Project is opposed from various quarters from its inception. The Movement started long time by tribal groups and non-tribal groups by questioning the Dam, its Policy and its Impacts. There have been a huge uproar of tribals against the Project in Odisha, Andhra Pradesh and Chhatisgarh. Environmentalists, social workers, NGOs, tribal leaders and local people started protesting the Project by realizing its manifold affects on involuntary tribal displacement, forest depletion and environmental issues.

Environmental-Economics is the relationship between environment and economic system. The advantages and disadvantages of Large Dam Projects should be defined through social gains and losses, The value of forest loss and bio-diversity depletion must be emphasized and take serious consideration. When Indira Sagar National Project is a gain to the developed society of Andhra Pradesh at the same time it is a loss to the border tribal area of Odisha, Chhatisgarh and Andhra Pradesh which are utterly backward and naxal affected tribal areas. The past experience shows Indira Sagar National Project (Polavaram) needs a proper investigation for its implementation where more than 20000 tribal people will be partly or fully affected. From the statistics, it is evident that more than 50 percent of the tribal population has been displaced due to the so called development Projects in India.

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