

## Resettlement Coping Strategies of Women Settlers Around Dams in Nigeria: A Case Study of Erelu Dam in Oyo, Oyo State, Nigeria

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**ABSTRACT** This study investigated resettlement coping strategies of women settlers around Erelu dam in Oyo, Oyo State of Nigeria. One hundred and forty women settlers were sampled for the study using stratified random sampling technique. Structured interview schedule was employed to collect data from the respondents. The results of the study showed that the coping strategies employed often or always by majority of the women settlers include fish processing (77.1%), fish marketing (78.6%) and processing of food crops into the final products (68.6%). Other coping strategies employed often or always are production of vegetables in irrigated area (44.3%), hair dressing (35.7%), cloth weaving (28.6%) and labour on other people's farms (20.0%). The results also showed that there is a positive and significant relationship between the respondents' ages and their scores on coping strategies ( $r = .267$ ) at 5% level of significance. Also, there is a positive and significant relationship between the respondents' years of formal education and their scores on coping strategies ( $r = .244$ ) at 5% level of significance. The dam construction has influenced a shift in the major occupation of most of the women settlers from trading to fishing activities. It is recommended that there should always be proper resettlement of displaced people in dam construction to enable the people to enjoy the full benefits of the dam.

### INTRODUCTION

Dams may be referred to as reservoirs of water held back by barriers. They are series of public infrastructure projects aimed at economic development of a river basin, a region or a nation. Several dams were constructed in Nigeria for purposes of irrigation, power generation, water supply and flood control. Out of the several dams, Nigeria has three giant hydro-electric dams located in Kanji, Shiroro and Jebba (New Bussa) all in Niger state of Nigeria. These dams are sources of hydro-electric power to Nigeria and some other West African countries.

A report by Roder (1994) reveals that while a number of dams in Nigeria have achieved the main goals for which they were constructed such as the provision of hydro-electricity, water supply or irrigation; constructions of some dams have also been instrumental in causing severe socio-economic hardships for those people who had to move to make way for the dams. An earlier report by Nigerian Environmental Study/Action Plan (1991) reveals that construction of dams requires not only feasibility studies, but also impact assessment studies of the communities that are likely to be affected with displacement and resettlement.

Studies by Cernea (1996) and Scudder (1999) reveal that resettlement sites are often selected without references to the availability of livelihood opportunities or the preferences of the displaced people themselves. The displaced people have often been forced to resettle in resource-depleted and environmentally degraded areas around the reservoir which rapidly lost their capacity to support the resettled population.

Studies by Burfisher and Horestein (1985) reveal that developmental programmes always have more negative impact on women than men. Men are amenable to the negative impact than women. Moreover, studies by Scudder (1999) show that women often lost their land without compensation during displacement and resettlement since they are not culturally recognized as land owners.

Displacement of local population in the process of dam construction requires proper resettlement. Resettlement, as used in this study, is a situation in which provision is made for the people who moved for the construction of the dam, by way of providing compensation, new houses, new land and services. Reports by Hoover (2000), Pottinger (2000) and World Commission on Dams (2000) show that the displaced and resettled populations always device means by

which they secure a living, have or acquire the requirements for survival and satisfaction of needs in their new settlements. The devices or means are referred to as coping strategies.

Studies by World Bank (1995) reveal that much of African economy particularly the agriculture and the informal sectors are in the hands of women. Women in Africa in general and specifically in Nigeria, however, have limited access to productive assets, including land and to such complementary factors of production as credit, fertilizer and education. A report by Olubowale (2003) indicates that Oyo State of Nigeria is completely land locked and has no access to sea and that the state is endowed with natural large water surface area. The large water surface area has made it possible to construct 28 dams for water supply to the local populations. Six out of the dams were constructed by the Water Corporation of Oyo State of Nigeria.

Erelu dam is one of the dams built by the Water Corporation of Oyo State. The dam was built in the ancient Oyo town in 1961 to supply water to the town and its environs.

There are needs to continually carry out impact assessment studies of the resettled communities after constructions of dams. It is also important to investigate the resettlement coping strategies of the resettled population, particularly the groups of people that may be more adversely affected by the displacement and resettlement.

This study therefore investigated the resettlement coping strategies of women settlers in Nigeria, with particular reference to women settlers around Erelu water dam in Oyo town, Oyo state of Nigeria. The study hypothesized that the personal characteristics of the women settlers did not influence the extent to which they were able to cope with livelihood in their new settlement.

## MATERIALS AND METHODS

The study was carried out around Erelu dam in Oyo town, Oyo state of Nigeria. The impoundment area of the dam is 161.07 hectares and the catchment area is 243.46 kilometres (Iroko, 2003). Erelu dam is about 6.40 kilometers from the heart of Oyo town. Oyo town is located in the north of Ibadan, the capital of Oyo state.

The major purpose of the construction of Erelu dam was to supply portable water in Oyo town and its environs. Unintended outcomes of

the dam construction include lowland farming activities along the edges of the dam, irrigation of arable crops by the farmers and migration of fishermen into the area. Settlers around the dam are from various states of Nigeria, namely: Benue, Kogi, Delta, Ondo, Osun, Ogun and Oyo states.

The population of the study comprises the women settlers in Erelu community. Stratified random sampling technique was employed to select a representative sample for the study. The study area was stratified into seven groups. The criterion for the stratification was their distance to the site of the dam. A total of 140 women settlers were sampled for the study. Data for the study were gathered through the use of structured interview schedule.

The dependent variable of the study is the score on resettlement coping strategies of each respondent. The independent variables of the study are some personal characteristics of the respondents. The ages and years of formal schooling of respondents were measured at ratio level, while their marital statuses and occupations were measured at nominal level.

## RESULTS AND DISCUSSION

**Personal Characteristics of the Women Settlers:** One of the specific objectives of the study is to identify personal characteristics of the women settlers. The results of the study reveal that a majority (62.9%) of the women settlers are between 20 and 39 years of age (Table 1). Another 34.2 percent are within the age bracket of 40 to 59 years. It may be inferred that most of the respondents are young women who are still in their early productive ages.

The results in Table 1 also show that most (88.6%) of the women settlers are married. The results corroborate Jibowo's (1992) results that the vast majority of the adult population of any society consists of married people.

More than half (64.3%) of the women settlers did not receive more than 6 years of formal education, while 21.4 percent did not receive any form of formal education. It may be inferred that there is low level of formal education among the women settlers. The results conform to those of the World Bank (1992) that there was low level of literacy among women in Africa in general and specifically in Nigeria.

About half (47.4%) of the women interviewed

**Table 1: Distribution of respondents by their personal characteristics**

Variables	Frequency	Cumulative frequency	Cumulative %
<i>Age groups (years)</i>			
20 – 29	36	36	25.7
30 – 39	52	88	62.9
40 – 49	28	116	82.9
50 – 59	20	136	97.1
60 – 69	2	138	98.6
70 – 79	2	140	100.0
<i>Formal Education (years)</i>			
0	30	30	21.4
1 – 6	90	120	85.7
7 – 12	2	122	87.1
12 – 18	8	130	92.9
19 – 24	8	138	98.6
25 – 30	2	140	100.0
<i>Marital Statuses</i>			
Single	6	6	4.3
Married	124	130	92.9
Divorced	2	132	94.3
Widowed	8	140	100.0

Source: Field survey, 2003

were traders of agricultural products like gari, palm oil, locust bean, provisions, clothes and kolanut before their settlement in the study area (Table 2). More than half (51.4 %) of the women settlers are currently engaged in fishing activities. Another 25.7 percent are engaged in irrigated farming of food crops and vegetables, while 18.6 percent are involved in trading of agricultural products (Table 2). The construction of the dam has therefore influenced changes in the major income generating activities of the women settlers.

**Coping Strategies Employed by the Women Settlers:** The results as contained in Table 3 reveal

**Table 2: Distribution of respondents by their major occupations**

	Previous occupations		Present occupations			
	Freq- uency	Cumu- lative Freq. %	Freq- uency	Cumu- lative Freq.	Cumu- lative %	
Schooling	4	4	2.9	0	0	0.0
Civil Service	2	6	4.3	4	4	2.9
Weaving	8	14	10.0	0	4	2.9
Hair dressing	4	18	12.9	0	4	2.9
Tailoring	4	22	15.7	0	4	2.9
Trading	66	88	62.9	26	30	21.4
Farming	20	108	77.1	36	66	47.1
Fishing	32	140	100.0	74	140	100.0

Source: Field survey, 2003

that the major coping strategies employed always or often by a majority of the women settlers include fish processing (77.1%), fish marketing (78.6%) and processing of food crops into the final products (68.6%). Other coping strategies employed always or often are production of vegetables in irrigated area (44.3%), hair dressing (35.7%), cloth weaving (28.6%) and labour on other people’s farms (20.0%).

The respondents were scored for the various coping strategies employed by them using a 5-point scale. The scale comprises never practiced

**Table 3: Distribution of respondents by the major coping strategies**

Strategies	Frequ- ency	Cumu- lative freq.	Cumu- lative %
<i>Fadama Activities</i>			
Never practised	50	50	35.7
Practised seasonally	14	64	45.7
Neutral	14	78	55.7
Practised often	26	104	74.3
Practised always	36	140	100.0
<i>Fishing Processing</i>			
Never practised	14	14	10.0
Practised seasonally	16	30	21.4
Neutral	2	32	22.9
Practised often	10	42	30.0
Practised always	98	140	100.0
<i>Fish Marketing</i>			
Never practised	10	10	7.1
Practised seasonally	14	24	17.1
Neutral	6	30	21.4
Practised often	14	44	31.4
Practised always	96	140	100.0
<i>Crop Processing</i>			
Never practised	24	24	17.1
Practised seasonally	16	40	28.6
Neutral	4	44	31.4
Practised often	28	72	51.4
Practised always	68	140	100.0
<i>Hair Dressing</i>			
Never practised	22	22	15.7
Practised seasonally	62	84	60.0
Neutral	6	90	64.3
Practised often	12	102	72.9
Practised always	38	140	100.0
<i>Cloth Weaving</i>			
Never practised	50	50	35.7
Practised seasonally	40	90	64.8
Neutral	10	100	71.4
Practised often	14	114	81.4
Practised always	26	140	100.0
<i>Farm Labour</i>			
Never practised	56	56	40.0
Practised seasonally	30	86	61.4
Neutral	26	112	80.0
Practised often	10	122	87.1
Practised always	18	140	100.0

(1), practiced seasonally (2), neutral/undecided (3), practiced often (4) and practiced always (5). The maximum score is 115, while the minimum score is 5 with a mean score of 61.4 (Table 4). The respondents were classified into coping statuses based on their scores on coping strategies. A majority (45.7%) of the respondents have average coping status, while 28.6 percent have high coping status (Table 4).

**Table 4: Distribution of respondents by their coping statuses**

Categories	Scores	Frequency	%
Low coping status	0 - 39	36	25.7
Average coping status	40 - 79	64	45.7
High coping status	80 - 119	40	28.6
Total		140	100.0

Minimum score = 5,  
Maximum score = 115,  
Mean score = 61.4  
Source: Field survey, 2003

**Relationships Between Selected Personal Characteristics and Coping Strategies of Women Settlers:** The results of the Pearson correlation in Table 5 show that there is a positive and significant relationship between the respondents' ages and their scores on coping strategies ( $r = .267$ ) at 5% level of significance. It may be inferred that the older the women settlers are, the more the coping strategies they employ.

Similarly, there is a positive and significant relationship between the respondents' years of formal education and their scores on coping strategies ( $r = .244$ ) at 5% level of significance. It may be concluded that the higher the respondents' levels of formal educational attainment, the more their coping strategies. This is because the fairly or well educated women settlers are not only employed in the informal sector of economy, but they are also employed in the formal sector.

**Table 5: Correlation between respondents' ages, formal education and scores on coping strategies**

Factors	Coping strategies	Ages	Formal education
Coping strategies	1.000	.267*	.244*
Ages	.267*	1.000	.337**
Formal education	.244*	.337**	1.000

\* Correlation is significant at the 0.05 level (2-tailed test)  
\*\* Correlation is significant at the 0.05 level (2-tailed test)

The results of the analysis of variance of mean scores of single, married, widowed and divorced women in Table 6 reveal that the calculated F-ratio (.362) is lower than the tabulated F-ratio (2.67) at 5% level. The null hypothesis is thus accepted, meaning that there are no significant differences in the scores on coping strategies of single, married, divorced and widowed women. It is therefore concluded that marital statuses of the women settlers did not significantly influenced their scores on coping strategies.

**Table 6: Analysis of variance of mean scores on coping strategies of four marital groups**

Marital groups	Mean scores	Calculated F-ratio	Tabulated F-ratio
Single	63.3	.362	2.67
Married	60.6		
Widowed	75.3		
Divorced	53.0		

## CONCLUSION

Majority of the women settlers are young, married and they did not receive more than primary education. The dam construction has influenced a shift in the major occupation of most of the women settlers from trading to fishing activities. The older the women settlers are, the more the coping strategies they employ. Also the higher the respondents' levels of formal educational attainment, the more their coping strategies. The fairly or well educated women settlers are employed in both informal and formal sectors of economy. Marital statuses of the women settlers did not significantly influenced their coping strategies.

Based on the results of the study, the following recommendations are made:

- (i) Women and other stakeholders in dam development should be part of decision-making processes of dam construction.
- (ii) There should always be proper resettlement of displaced people in dam construction to enable the people to enjoy the full benefits of the dam.

## REFERENCES

- Burfishers, M.E. and Horestein, N.R.: *Sex Roles in the Nigerian Tiv Farm Households*. Kumar Ian Press, West Hartford (1985).
- Cernea, M.M.: *The Risk and Reconstruction Model for Resettling Displaced Populations. Unpublished paper of the Refugee Studies Programme*, Oxford University (1996).

- Hoover, R. Dams Worsen Zambezi Flooding. *World Rivers Review*, **16**: 1 (2000).
- Iroko, I. A.: *Effect of Erelu Water Dam on Livelihood Activities of Settlers in Atiba Local Government Area of Oyo State*. An Unpublished Thesis in the Department of Agricultural Extension and Rural Development, University of Ibadan, Nigeria (2003).
- Jibowo, A.A.: *Essentials of Rural Sociology*. Gbemi Sodipo Press Ltd, Abeokuta, Nigeria (1992).
- Olubowale, O.: Lake Fisheries Management in Oyo state. *Lecture Delivered to the Officers Handling the International Food and Agricultural Development-Assisted Artisan Fisheries* (2002).
- Nigerian Environmental Study/ Action Team: *Nigeria's Threatened Environment: A National Profile*. Nigerian Environmental Study/ Action Team. Ibadan, Nigeria (1991).
- Pottinger, L.: World Commission on Dams Confirms Social, Economic, Environmental Harm from Dams: Critics Demand Dam-Building Moratorium, Reparations for Past Damages. *World Rivers Review*, **15**: 1-6 (2000).
- Roder, W.: *Human Adjustments to Kainji Reservoir in Nigeria*. University Press of America, New York, London (1994).
- Scudder, T.: Dam-induced Community Resettlement: Principles and issues. *Memorandum prepared for the World Commission on Dams, Cape Town* (1999).
- World Bank: *The Population, Agriculture and Environment Nexus in sub-Saharan Africa*. Agriculture and Rural Development Series No.1. The World Bank, Washington (1992).
- World Bank: *Toward Gender Equality: The Role of Public Policy*. The World Bank, Washington (1995).
- World Commission on Dams: *Dams and Development: A New Framework for Decision-Making*. World Commission on Dams, Cape Town (2000).