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Financial Capital and Adaptive Capacity in Oil Impacted Communities of the Niger Delta

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ABSTRACT

The study examined the role financial capital plays in enhancing adaptive capacity of rural households in crude oil impacted communities of the Niger Delta region. The study was conducted amongst 610 respondents in 6 oil producing communities of the Niger Delta. Structured questionnaire was the primary instrument of data collection, while descriptive statistics was utilized for data analysis. Findings from the study revealed that while personal savings, remittances and borrowing are the major sources of livelihood finances for respondents, access to micro credit facilities is rather scanty in the study area. This notwithstanding, community based local institutions such as thrift societies and co-operatives happens to be the major provider of credit loan facilities in the communities. More so, investigation into the usage of financial capital in terms of priority revealed that inter alia most respondents utilize financial capital on purchase of agricultural inputs, livelihood diversification and debt servicing. Based on the foregoing, the paper concludes that improved access to financial capital essentially promotes adaptive capacity by providing immediate financial relief during socio-ecological stresses, promoting diversification of livelihood strategies, and supporting local long term adaptation projects.

Keywords: Financial Capital, Adaptive Capacity, Environmental Degradation, Niger Delta.

INTRODUCTION

The environmental externalities arising from oil and gas exploration in the Niger Delta region has continued to undermine the lives and livelihoods of communities who host oil and gas facilities. The range of activities that constitute widespread pollution in the region includes oil spillage, gas flaring, and deforestation etcetera (Jack et al, 2016; Agbonofi, 2016; Aniefiok, e al. 2013). The traditional fishing and farming livelihood activities of the people have been adversely impacted by oil spillages and gas flaring as existing studies have reported destruction of farmlands and river bodies as well as associated reduction in fish and farm yields (Emmanuel, 2016; Idodo-Umeh, & Ogbeibu, 2010; Abii & Wosu, 2009). This worrisome situation have impoverished most households and communities in the Niger Delta as oil induced environmental degradation has continually resulted in dwindling natural resources as well as reduced income for daily livelihood needs. As a survival strategy, households and communities in the Niger Delta have over the years pursued livelihood diversification by expanding their livelihood activities in a bid to secure increased income (Jack & Anele, 2018; Inyang & Udong, 2013). This notwithstanding, most households lack the needed resources, especially financial capital to pursue sustainable livelihood options aimed at guaranteeing secured livelihoods. It is in view of the foregoing that this study explored the potentials of improved access to financial capital in enhancing adaptive capacity of households and communities in the Niger Delta. Specifically, the study addresses the following research questions:

a. What are the major sources of livelihood finances in the study communities?
b. What are the major uses of livelihood finances in the study communities?
c. Does improved access to financial capital enhance adaptive capacity of households in the study communities?

Financial Capital and Adaptive Capacity: An Empirical Review

Financial capital according to the Sustainable Livelihood Framework (DFID, 1999) refers to the financial resources available to people which aids them to achieve their livelihood objectives. It includes availability of flows (cash or its equivalent) and stocks (savings held in several forms such as cash, bank deposits or liquid assets such as jewelry and livestock) that can contribute to production, consumption and enables people adopt different livelihood strategies. This implies that financial capital is significantly a principle factor which determines the choice of livelihood strategies of households and can enhance the adaptive capacity of communities. Some of the sources of financial capital that the rural poor largely depends on includes: (i) financial resources obtained through sale of available asset stocks (ii) micro-credit from credit providing institutions, (iii) remittances from relatives/friends in urban centers or abroad (iv) cash transfers from state or private institutions such as pensions and so on.

The literature on adaptive capacity and livelihood resilience suggests that financial capital plays an essential role in sustaining livelihoods of the poor, especially those living in marginal environments. Accordingly, two major sources of financial capital appears critical to this study and these include access to credit facilities and remittances.

The Role of Access to Credit Facilities

Diro and Regasa (2014) in their study on the impact of Micro Credit on borrowers assessed the impact of Dedebit Credit and Saving Institutions (DECSI) Micro Credit Service on the household livelihoods of resident of Mekelle city in Ethiopia. The study which involved 118 clients and 169 non-clients shows that participation in the micro credit scheme has positive significant effect on average monthly income, savings, consumption expenditure, improvements in housing, children's education and medical expenditure. The findings from the study indicate that access to micro credit has not only enhanced the livelihoods of the beneficiaries but their adaptive capacity and resilience of their livelihoods.

In another study, Esmat and Assraf (2015) investigated the impact of Grameen Bank Micro Credit programme on the livelihoods of 40 women beneficiaries in Bangladesh. The findings reveal that women are being empowered as a result of increasing access to microcredit, as it gives them more control over household assets and resources, more freedom and decision making power, and greater access to participation in all spheres of life.

More so, Ukpe, Nweze and Arene (2016) conducted a recent study on food insecurity status of farming households in the Niger Delta. The study involved 384 crop farmers who were stratified into micro credit beneficiaries and non-beneficiaries. The study using several vulnerability indexes reveal that micro credit enhances the resilience of rural farm households in the region. The results of the vulnerability index analysis show that the non-beneficiary households record a high level of vulnerability (0.55) whereas the beneficiary households recorded a low level of vulnerability (0.47).

The above evidences notwithstanding, findings from Siyoum, Hilhorst and Pankhurst (2012) proved otherwise. Their study examined the differential impact of micro credit on rural livelihoods in Ethiopia. Findings from the study indicate that whereas credit ironically failed to enable poor households to move out of poverty and food insecurity, better-off and labour rich households utilized credit to improve their livelihoods. They argue that this is so because poor households who are faced with challenges of poverty would rather want to divert micro credit they receive from the original long-term (agricultural investment) purposes to short-term (consumption smoothing) purposes. This attitude on the long run predisposes them to risks of being trapped into a cycle of poverty and indebtedness. Furthermore, the findings reveals that access to credit could not significantly enhance their assets of poor households due to the indebtedness and poverty trap. On the other hand, as a livelihood diversification strategy, better-off households were able to utilize micro credit to build their assets especially in livestock. The study in conclusion argues that more participation in safety net programmes can help the poor break through this cycle of poverty since credit has not only failed in improving agricultural productivity, but increased the poor's debt burden.

The empirical evidences so far presented are far reaching as the role of micro credit in rural livelihood advancement and sustainability cannot be overemphasized. However, it is important to state here that providing access to credits without corresponding access to natural, physical, human and social capitals such as access to land, skills trainings and information on utilization of credit and best technical practices, would not always yield expected results of improved livelihoods and social resilience of the poor.

The Role of Remittances

Remittances which refer to money sent home by internal or international migrants, have been known to be a significant strategy to reduce poverty, enhance adaptive capacity and increase resilience of poor families and entire communities impacted by environmental degradation and climate change. Evidence in the literature has shown that internal and international migrants have relied on remittances as a means of improving the household income of their families and relatives back home. Monies and goods gotten from remittances are then utilized by the families and relatives in augmenting basic survival needs such as food, housing and consumer goods (Banerjee et al. 2016; Banerjee et al. 2017).

In this regard, Scheffran, Marmer and Sow (2012) argues that emerging evidence indicate that remittances in developing countries show that on the average, the rate of remittances from African immigrants is twice as much as those from other developing countries. Also they submit that as a result of higher per capita income and stronger currency in more developed and stronger economies, remittances transferred home from these countries are generally higher. For instance it was reported in the study that migrant remittances accounted for 65% of household's cash income in the Senegal River valley region; and that Malians and Senegalese living in France transfer about 10-15% of their monthly income as remittances.

More so, Barnejee et al (2016) and Barnejee et al (2017) investigated the role of remittances in building household farm assets and adaptive capacity in Nepal and India respectively. Findings from Nepal indicate that remittances comprise a major constituent of household income of recipients. More so, a larger chunk of remittances are used to purchase food, pay for healthcare and educational services, loan repayment, and consumer goods. Nonetheless, findings also show that some recipients invested little of their remittances in insurance schemes as disaster preparedness and mitigation strategies. Furthermore, findings from India reveal that remittances apart from its contribution to household income and livelihood, also strengthens adaptive capacity of recipient households to environmental shocks and seasonality. The study hence concludes that remittances do have a significant and positive association with structural changes that households make in addressing issues pertaining to farm mechanization, improving household's access to borrowing, and participation in collective action on natural disasters such as flood relief, recovery and preparedness.

The significant role remittances play in improving rural livelihoods and enhancing adaptive capacity is equally evident within the Nigerian context. In this regard, Okali, Okpara and Olawoye (2001) in their study investigated the patterns of rural-urban interactions and its impact on livelihood strategies in Aba, Abia state. Findings from the study indicate that remittances in cash and kind are a prevalent feature of urban-rural interactions as they are important survival strategies for the rural poor. Remittances are used in meeting rural livelihood needs such as cash for investments in agriculture and petty businesses, cash to purchase building materials, food items and other consumables.

In a related study, Asogwa and Agbo (2013) investigated the impact of remittances on livelihoods of 120 recipient farm households in Enugu. The findings from the study reveal that remittances are a predominant livelihood strategy in the study area and the most common means of remittance delivery is by hand delivery. More so, cash and non-cash transfers are usually used in meeting pre-existing household needs/expenses including household consumption, agricultural inputs and debt servicing. Lastly it was reported that a number of factors affects the impact of remittances on livelihood systems of recipient households and these include the number of social organizations the household heads belong to, the age of household head, farm size, family size and the proportion of remittance that is invested in agriculture and other livelihood activities. In the light of the foregoing empirical literatures, it becomes evident that remittances are a key component of adaptive capacity and resilience building amongst the poor.

RESEARCH METHODS

The study adopted a cross sectional research design, it was conducted amongst 610 respondents drawn from 6 oil impacted communities of the Niger Delta including Polaku and Ogboinbiri communities of Bayelsa state, Bille and Bodo communities of Rivers state, as well as Umutu and Kokodiagbene communities of Delta state. Based on the geo-political structure of riverine and upland dichotomy in the region, communities were clustered into 2 categories i.e. riverine and upland communities in each state. In this light, 1 oil producing community was randomly selected in each cluster, culminating into 2 communities per state and 6 communities in total. At the community level, households were the unit of data collection and analysis, as household heads were recruited to participate in the study through the systematic random sampling technique where every 6th household is selected to be part of the study. The distribution of number of households in the study by the communities indicate that while 126 respondents are from Bille community, 116 are from Ogboinbiri community, 108 from Polaku community, 92 from Umutu community, 88 from Kokodiagbene community and 80 from Bodo community. In each community, closed-ended structured questionnaire instrument was utilized to collect data from the sampled respondents. The questionnaire instrument and response categories were coded in the Statistical Package for Social Sciences software (SPSS, Version 20) and data analysis was conducted with descriptive statistics tools and presented with graphs and charts.

RESULTS AND DISCUSSIONS

Socio-Demographic Characteristics of Respondents

Table 1 displays the socio-demographic characteristics of the respondents; the table reveals that while 51.7% of the respondents are men, 48.2% are women. The data also revealed that 4.9% of the respondents are less than 20 years, 21.3% are between 20-29 years, while 31.5% are between 30-39 years and 20.3% aged between 40-49 years, 15.7% aged between 50-59 years, and 6.2% are above 60 years. The table also indicates that whereas 11.5% of the respondents have not attained any level of formal education, 13.4% have attained basic level education, 52.1% have attained secondary level education, while 20% have acquired tertiary level education, and only 3% reported to have attained vocational education.

Table 1: Socio-Demographic Characteristics of Respondents

Variables	Frequencies (n = 610)
1. Gender	**610**
Male	316
Female	294
2. Age	**610**
Less than 20	30
20-29	130
30-39	192
40-49	124
50-59	96
60 and above	38
3. Educational Attainment	**610**
No Formal Education	70
Primary	82
Secondary	318
Tertiary	122
Vocational	18
4. Primary Occupation	**610**
Farming	168
Fishing	136
Trading	150
Artisan	44
Civil Service	48
Oil Company Staff/Contractor	22
Unemployed	28
Others	14
5. Average Monthly Income	**610**
Below N10,000	198
N10,000 – N30,000	238
N31,000 – N50,000	80
N51,000 and above	94

Source: Fieldwork, 2018

In furtherance, the data also indicate that whereas 27.5% of the respondents are farmers, 22.3% are engaged in fishing, while 24.6% petty traders. More so, whereas artisans make up 7.2% of the respondents, civil servants constitute 7.9% of the respondents, while 3.6% are Oil Company workers/contractors, 2.3% are engaged in other menial livelihood activities, and 4.6% unemployed. Finally, the table reports the income levels of the respondents, the data revealed that whereas 32.5% of them earn less than ₦10, 000 monthly, 39% earn between ₦10, 000 - ₦ 30, 000, while 13.1% between ₦31, 000 - ₦50, 000, and only 15.4% of the respondents earn above ₦51, 000 monthly.

Sources of Livelihood Finances

The study investigated the role of financial capital in strengthening adaptive capacity of households in the communities. In achieving this objective, respondents were asked to ascertain the source of finance through which they support their various livelihood activities. The findings as shown in figure 1 indicate that 73.3% of the respondents reported that they raise monies for their livelihood activities through personal savings. Also whereas 10.8% of the respondents assert that they raise monies to support their livelihood activities through borrowing from friends and relatives, 7.8% of them rely on remittances from relatives and family members living and working outside of their community.

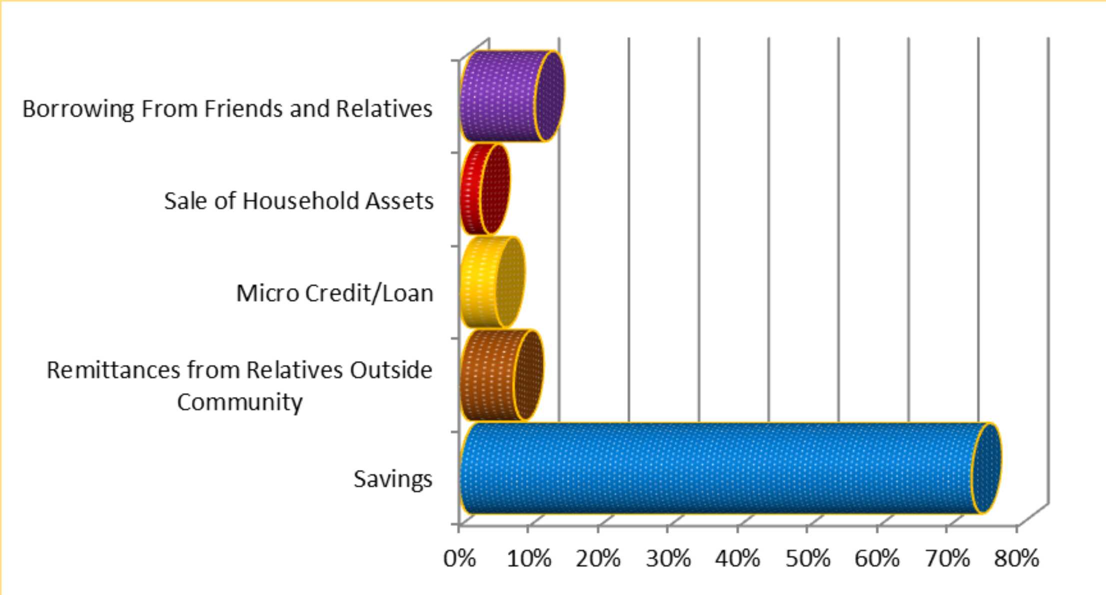

Figure 1: Distribution of Respondents by Sources of Livelihood Finances
Source: Fieldwork, 2018

In addition, 3% of the respondents assert that they raise monies to support their livelihood activities through sale of their household assets, and only 5.1% of the respondents reported that they raise monies for their livelihood activities through micro credit loans from various sources. The data reveals that most households in the study communities and the region at large depend on their individual agency through savings, sale of households and resource exchange with other members of their communities to support their livelihood activities.

Sources of Micro Credit Loans

Further investigation was conducted to ascertain the source of micro credit loans amongst those who reported they raise livelihood finances through micro credit. Results from figure 2 show that whereas 43.2% of them reported to access micro credit from their occupational cooperatives/thrift societies they belong to, 29.7% access micro credit from other community based associations they affiliate with, and 15.2% of them reported that they get micro credit loans from micro credit banks and institutions. A majority of them reported that the ‘Lift Above Poverty Organization’ (LAPO) has provided them micro credit facilities.

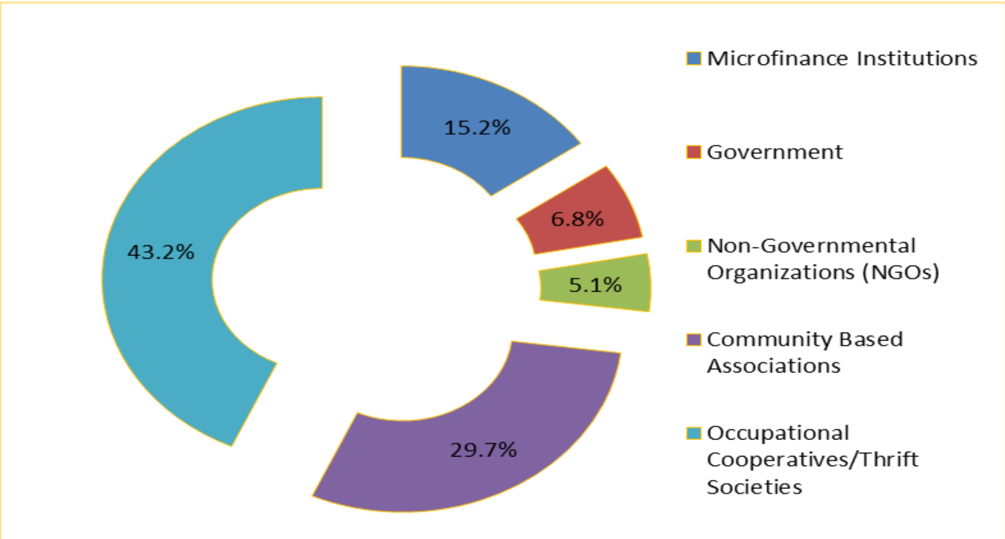

Figure 2: Distribution of Respondents by Sources of Micro Credit Loans
Source: Fieldwork, 2018

More so, whereas 6.8% of those who have received micro credit facilities reported that they got such from governmental interventions especially by the state and local governments, 5.1% of them receive such micro credit interventions from Non-Governmental Organizations.

Priority of Financial Capital Utilization

In addition, a further probe was done to ascertain what the respondents utilize the monies they get from micro credit institutions and remittances in terms of priority. Results from the survey as indicated in figure 3 reveal that a majority (49%) of the respondents who have received micro credit loans or remittances from family members utilize such monies on investing in other secondary livelihood activities. This implies that increased access to financial capital can promote livelihood diversification and by extension enhance adaptive capacity of households and communities across the region at large. Despite the fact that most respondents utilize their financial capital on diversification activities, 19% of the respondents reported to have invested such monies into purchasing agricultural inputs in order to boost the productivity of their farming and fishing livelihood activities. More so, whereas 10% reported that they utilize such monies to cover for food gap, 9% reported to have used their financial capital in purchasing livestock as a way of improving their household livelihood assets.

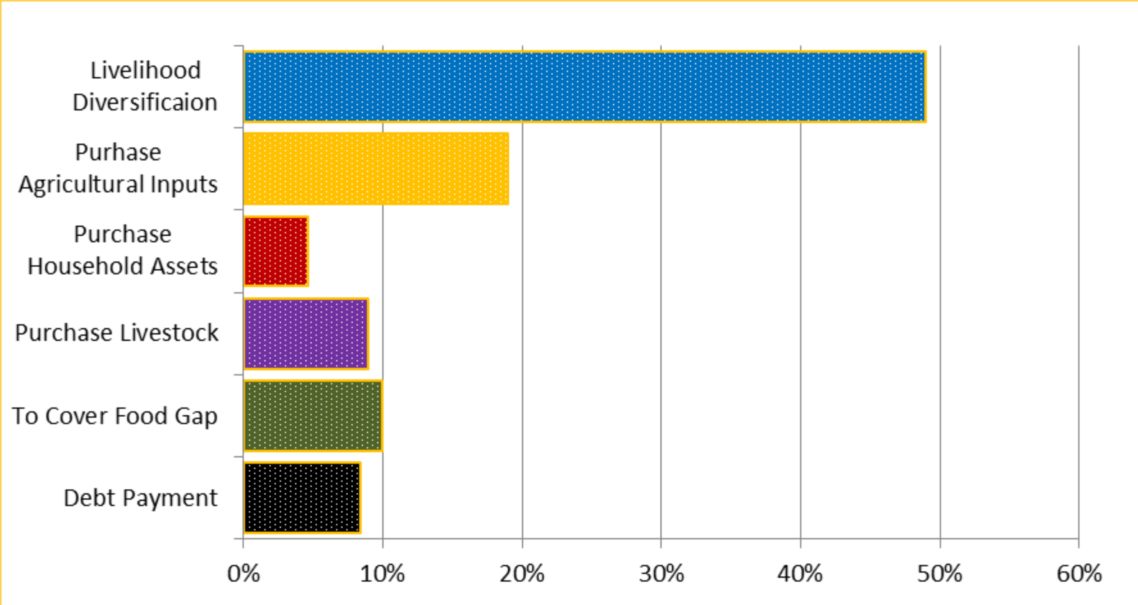

Figure 3: Distribution of Respondents by Use Priority of Financial Capital

Source: Fieldwork, 2018

Lastly, while 8.4% reported that they utilize monies gotten from micro credit institutions and remittances to service their debts, 4.6% of them argued they use such monies to purchase household assets.

Does Improved Access To Financial Capital Enhance Adaptive Capacity?

Respondents were further asked if improved access to financial capital has enhanced their capacity to adapt to the challenges of environmental degradation. The result as shown in figure 4 indicates that whereas 6.2% of the respondents strongly disagreed with the notion, 5.9% of them disagreed with the notion.

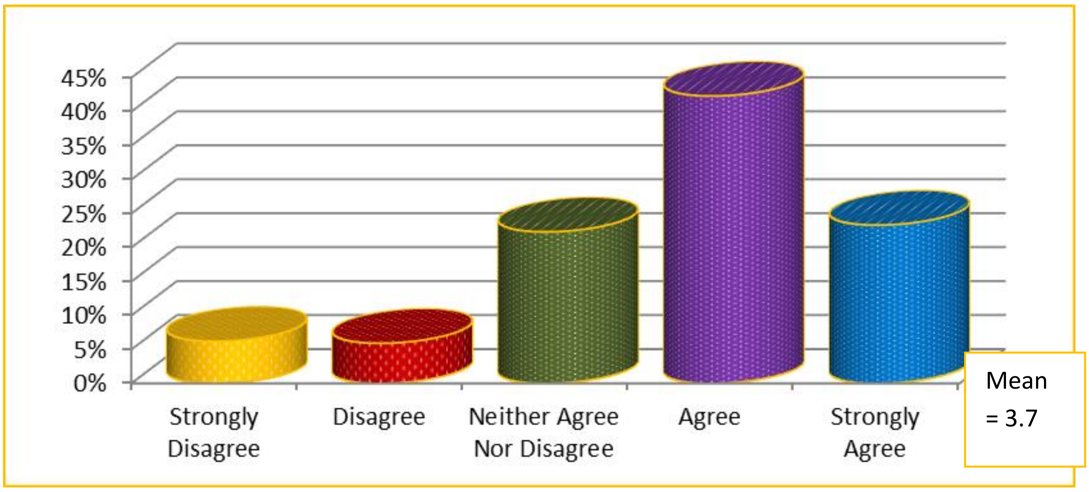

Figure 4: Distribution of Respondents by Whether Access to Financial Capital Promotes Adaptive Capacity

Source: Fieldwork, 2018

More so, the result produced a mean response of 3.7, which is above the 2.5 mid mark, thereby indicating that a majority of the respondents argued that access to financial capital has promoted their capacity to adapt to the livelihood impacts of environmental degradation in their communities. By implication, the results derivable from the study revealed that access to financial capital enhances the livelihoods of the people and promotes their adaptive capacity to livelihood shocks arising from environmental degradation.

CONCLUSION

The study investigated the role financial capital plays in promoting adaptive capacity in oil impacted communities in the Niger Delta. The findings from the study has shown that while personal savings, remittances and borrowing are the major sources of livelihood finances, access to micro-credit loans are scanty in the study communities. This may be largely associated to the widespread absence of micro finance banks and credit organizations in the study communities which are largely rural. This situation has constrained the ability for rural dwellers to access micro-credit, aimed at improving their agricultural productivity or diversifying their livelihoods. This notwithstanding, the study has established that improved access to financial capital has great potential in enhancing the adaptive capacity of the study communities. The submissions of this study corroborates the findings from earlier studies by Barnejee et al (2017), Ukpe, Nweze and Arene (2016), Esmat and Assraf (2015), Diro and Regasa (2014), Asogwa and Agbo (2013), that financial capital whether in form of remittances or micro credit promotes the livelihoods and adaptive capacity of the rural poor. Based on the foregoing, the paper concludes that access to financial capital essentially promotes adaptive capacity and community resilience by providing immediate financial relief during socio-ecological stresses, promoting diversification of livelihood strategies, and supporting local long term adaptation projects.

RECOMMENDATION

Based on the findings of the study, we recommend that improved access to financial capital must be guaranteed in rural Niger Delta region, through the establishment of micro credit schemes and organizations in these communities. More so, interventionist agencies in the region both governmental and non-governmental should adopt the micro credit approach by encouraging local farmers and fishermen to establish co-operatives through which such funds can be administered to the end users. This will be aimed at enabling those whose livelihoods have been negatively impacted by oil pollution to either acquire requisite agricultural inputs to productivity or to diversify their livelihood strategies.

REFERENCES

Abii, T. A., & Nwosu, P. C. (2009). The Effect of Oil-Spillage on the Soil of Eleme in Rivers State of Niger-Delta Area of Nigeria. *Research Journal of Environmental Sciences, 3, 316-320.*

Agbonofi, P. (2016). Oil Spills Injustices in the Niger Delta Region: Reflections on Oil Industry Failure in Relation to the United Nations Environmental Programme (UNEP) Report. *International Journal of Petroleum & Gas Exploration Management, 2(1), 26-37.*

Aniefiok, E., Ite, A.E., & Udo, J.I. (2013). Gas Flaring and Venting Associated with Petroleum Exploration and Production in Nigeria's Niger Delta, *American Journal of Environmental Protection, 1(4), 70-77*.

Asogwa, U.G., & Agbo, F.U. (2013). Migration, Remittances and Livelihood Systems of Farm Households in Enugu State, Nigeria. *Journal of Biology, Agriculture and Healthcare, 3(7), 184-191.*

Banerjee, S., Bandita, S., Meena, P., Suman, B., & Dominic, K. (2016). Role of Remittances in Building Farm Assets in the Flood Affected Households in Koshi Sub-Basin in Nepal. In Milan, A., et al. (eds.), *Migration, Risk Management and Climate Change: Evidence and Policy Responses*, Global Migration Issues 6. Switzerland Springer International Publishing

Banerjee, S., Dominic, K., Richard, B., Suman, B., Partha, J., Bidhubhusan, M., & Sabarnee, T. (2017). Do Financial Remittances Build Household-Level Adaptive Capacity? A Case Study of Flood-Affected Households in India. *Global Knowledge Partnership on Migration and Development (KNOMAD) Working Paper 18.*

Department for International Development (1999). Sustainable Livelihood Guideline Sheets.

Diro, B.A., & Regasa, D.G. (2014) Impact of Micro Credit on the Livelihood of Borrowers: Evidence from Mekelle City, Ethiopia. *Journal of Research in Economics and International Finance, 3(1), 25-32*.

Emmanuel, A. A (2016). Wetlands and Livelihood Sustainability: Qualitative Evaluation of the Impact of Oil Exploitation in Ogbia Local Government, Bayelsa State, Nigeria. *Journal of Geography, Environment and Earth Science International, 5(2): 1-12.*

Esmat, A., & Assraf, S. (2015). Impact of Grameen Bank Microcredit Program on the Livelihood Status of Women Beneficiaries in Bangladesh. *American International Journal of Research in Humanities, Arts and Social Sciences. 9(4), 323-332.*

Idodo-Umeh, G., & Ogbeibu, A. E. (2010). Bioaccumalation of the Heavy Metals in Cassava Tubers and Plantain Fruits Grown in Soils Impacted with Petroleum and Non- Petroleum Activities. *Research J. of Environmental Sciences, 4 (1), 33 – 41.*

Inyang, E.B., & Udong, E.E. (2013). Livelihood Insecurity and Diversification among Women in an Environmentally-Challenged Niger Delta Region, Nigeria. *The International Journal of Humanities & Social Studies, 1 (1), 35-43.*

Jack, Jackson T.CB; & Anele, K.A (2018). Livelihood Diversification and Income Levels Amongst Rural Households in Oil Impacted Communities of the Niger Delta. *Port Harcourt Journal of Social Sciences, Volume 8 (1), 314-332*

Jack, Jackson T.C.B., Akujobi, C.T., Dan Axe, U., & Azubuike, B.O (2016). Crude Oil Exploration and Underdevelopment in Nigeria: A Resource Curse Analysis. *TechnoScience Review, 7 (1-2),31-44.*

Okali, D., Okpara, E., & Olawoye, J. (2001). *Rural-Urban Interactions and Livelihood Strategies Series*. *The Case of Aba and its Region, South-Eastern Nigeria.* Working Paper 4. International Institute for Environment and Development.

Scheffran, J., Marmer, E., & Sow, P. (2012). Migration as a Contribution to Resilience and Innovation in Climate Adaptation: Social Networks and Co-Development in Northwest Africa. *Applied Geography, 33(1), 119-127.*

Siyoum, A.D., Hilhorst, D., & Pankhurst, A. (2012). The Differential Impact of Micro Credit on Rural Livelihoods. Case Study from Ethiopia. *International Journal of Development and Sustainability, 1 (3), 957-975.*

Ukpe, O.U., Nweze, N.J., & Arene, C.J. (2016). Food Insecurity Vulnerability Status of Farm Households in Niger- Delta, Nigeria. *International Journal of Food and Agricultural Economics, 4 (1), 109-123.*