

DOES SKILL ACQUISITION IMPROVE RURAL HOUSEHOLD INCOME LEVELS? EVIDENCE FROM OIL IMPACTED COMMUNITIES OF THE NIGER DELTA

JACK, JACKSON T.C.B

Department of Sociology & Anthropology
Federal University Otuoke, Bayelsa State, Nigeria

PAUL EKE

Professor

Department of Sociology
University of Port Harcourt, Rivers State, Nigeria

And

KINAKANWO ANELE

Professor

Department of Sociology
University of Port Harcourt, Rivers State, Nigeria

Abstract

The study examined the relationship between livelihood skills acquisition and household income levels in the Niger Delta region. Utilizing both quantitative and qualitative approaches, the study was conducted in 6 oil producing communities in Bayelsa, Rivers and Delta states, where 610 respondents were administered copies of the questionnaire and 72 respondents who participated in interviews and focus group discussions. Findings from the study indicates that opportunities for livelihood trainings are scanty in the study area as only a handful of the respondents have benefited from skill acquisition training. More so, trainings for farmers, fishermen, entrepreneurial and vocational skills are the prevalent livelihood skill acquisition programmes reported in the study area, while community-based organizations, multinational oil companies, government, religious organizations and non-governmental organizations were identified as the major providers of skills training in the study area. The test of hypothesis produced a non-significant relationship between participation in livelihood skills training and household income levels. The study concluded that access to skills training in itself do not translate to improvement in the income level of households as factors such as absence of starter packs, nature and duration of trainings, financial incapacitation and general infrastructural backwardness in communities constrains the utilization of acquired skills into profitable venture. Keywords: Livelihood, Skill Acquisition, Income, Rural Households, Niger Delta.

Introduction

The livelihood of most rural households, especially those in developing countries are highly dependent on natural resource extraction and other land-based activities such as agriculture (Arild et al., 2011). In recent times, rural livelihoods especially those of the poor and disadvantaged are increasingly becoming threatened by the contemporary global changes in the natural environment upon which their livelihoods depend (Homer-Dixton, 1999).

Increasing environmental pollution and dwindling environmental resources have adversely impacted the lives and livelihoods of rural dwellers world over. The situation in the oil rich Niger Delta region where over 60% of the population rely on farming and fishing activities and whose traditional livelihoods are been displaced is a pointer to this fact (Zabbey, 2009). Six decades of oil and gas exploration in the region has constituted several forms of environmental degradation in the region such as oil spillages, gas flaring, deforestation and so on (Kadafa, 2012; Ojimba et al. 2014; Jack et al. 2016). The realities of oil related livelihood dislocations have constituted fundamental developmental challenges for the Niger Delta

people (Okon & Egbon, 1999). The incidences of poverty and youth unemployment in the region are increasing over the years with associated poor human development realities (Okaba, 2005; UNDP, 2006). In response to the development challenges confronting the Niger Delta, several interventionist agencies including the government, non-governmental organizations and multinational oil companies have adopted diverse strategies to address the poverty situation in the region (Oghiagbephan, 2016). One prominent strategy utilized has been the human capacity building approach which most times involve the empowerment of communities through skill acquisition programmes. Skills training are designed to bridge the skills gap in amongst individuals and communities in expectation of increased opportunities for diversifying livelihood portfolios and promoting income streams for the people. In view of the foregoing, scholars have examined livelihood skills acquisition in the Niger Delta from diverse perspective. For instance in their separate studies, Godstime and Joseph (2016) as well as Okwelle and Deebom (2017) focused on skills acquisition as tool for youth empowerment in the region. Egbe et al. (2011) examined the role of entrepreneurship empowerment as panacea to youth restiveness in the region, while Uranta (2013) examined the effect of capacity building programmes on the well-beings of beneficiaries. More so, Uranta and Nlerum (2017) in their study evaluated the effectiveness of skills acquisition programmes of Shell Petroleum Development Company (SPDC) and the Niger Delta Development Company (NDDC).

Drawing from the foregoing, the existing literature suggests that skills acquisition programmes has over time become a prominent strategy for poverty reduction in the Niger Delta. This notwithstanding, the extent to which access to skills acquisition trainings have actually improved household income levels in the Niger Delta remains scant in existing literature. This therefore suggests a gap in the existing body of literature in this area of scholarship. It is in a view to fill this knowledge gap that this study investigated if access to skills acquisition trainings actually improves household income levels in the Niger Delta region of Nigeria.

Specifically, the study addresses the following research questions:

- a. How accessible are livelihood skills acquisition trainings in the study communities?
- b. What types of skill acquisition trainings are available to beneficiaries in the study communities?
- c. Who are the major providers of livelihood skills acquisition trainings in the study communities?
- d. Does access to livelihood skills acquisition trainings improve household income levels in the study communities?

Review of Empirical Literature

The existing empirical literature on livelihood resilience suggests that education and social learning are keys to resilience and adaptive capacity (McCarthy et al. 2011). A critical review of existing literature reveals that skills acquisition has been established to promote social learning as well as building the capacity of households to diversify their livelihood portfolios and increase their income levels. In their study, David and Asamoah (2011) focused on the impact of Farmer Field Schools (FFS) on human and social capital in Ghana. They surveyed 70 FFS graduates and 70 non-FFS graduates and the findings show that the FFS scheme was an effective means through which complex knowledge are communicated to farmers. The study revealed that when compared to non-participants, farmers who participated and graduated from the farmer field schools possess superior knowledge and improved capacity to solve problems of productivity. The findings also indicate that with the participation in the FFS, social cohesion was increased among cocoa farmers. Also, the FFS enhanced individual social skills as it provided opportunities for creation of new social networks for support and knowledge exchange, while promoting establishment of new farmers groups thereby improving their capacity for effective group work. On the overall, the study concluded that the FFS increased the knowledge and skills of the farmers, which by extension increases their capacity to adapt to environmental changes and seasonality.

In another study, Veeranjanyulu, Krishnaveni, Lakpathi and Rajanikanth (2014) investigated the role of access to skill development in enhancing livelihoods of 118 rural women in India. The

study focused on how apparel making and embroidery trainings could enhance livelihood opportunities. The findings revealed that trainees gained in knowledge by 151.6% as they were equipped with hands on experience. The outcome of these trainings includes trainees setting up their own businesses while others secured jobs in apparel companies. The findings hence suggest that access to apparel making and embroidery trainings has aided the diversification of livelihoods of rural women especially house wives. This has provided them supplementary income thereby enhancing their adaptive capacity to changes in their farm-based livelihood activities.

Similarly, in a related study, Dubey, Bhadra and Santra (2015) investigated the role human capital plays in changing livelihood patterns in West Bengal region of India. The findings indicate that communities with higher literacy rate such as Krishnanagar (85.36), and Dhawpara (75.81) have better socio-economic livelihood conditions when compared to communities with lower literacy rate such as Haripur (66.41) and Bansdob (45.50). The study reports that communities with lower literacy rate have poorer and insufficient educational infrastructure and higher out of school children due to their engagements in livelihood activities especially weaving. The study hence concludes that increased access to education translates to better and sustainable livelihood outcomes and by extension enhanced adaptive capacity and community resilience.

A recent study by Robinson-Pant (2016) on agricultural education and improved rural livelihoods in Cambodia, Egypt and Ethiopia revealed that indigenous agricultural knowledge and skills on adaptation are passed on from older generations to younger ones through informal oral and formal mediums in communities such as written materials, observations and interactions. The study reports a wide range of agricultural knowledge providers including (i) government educational institutions (schools and technical colleges), (ii) adult literacy providers (NGOs and government) (iii) employers (including private companies) and employment agencies. Some non-formal learning identified included (i) adult literacy programmes, (ii) commercial agricultural programmes, (iii) agricultural extension services, and (iv) on-the-job training. The findings also show that poorer people lacked access to new technologies unlike the richer people with land and assets. The study concludes that livelihood skill trainings can be enhanced through local and conventional forms of mass media and that access to learning agricultural knowledge and skills will improve sustainable rural livelihoods on the overall.

In addition to the above, recent studies in Nigeria have increasingly acknowledged the role of skills acquisition in poverty reduction and economic growth. For instance Ezeji and Okorie (1999) argued that the provision of adequate vocational training in skills, raw materials, machineries and equipment would to a great extent drastically reduce the social and economic problems Nigeria is currently faced with. Similarly while studies by Uloko and Ejinkoye (2010), Amadi and Abdulla (2012), Akpama et al. (2011) suggests that vocational and entrepreneurial skills acquisition provides avenue for wealth creation and poverty reduction, Kadiri and Oriazoluanlan (2009) underscores its role it increasing self-reliance and enhancing the capacity for socio-economic growth.

More specifically, studies from the Niger Delta have produced similar results to the aforementioned reports. In their study, Okwelle and Deebom (2017) reported that technical and vocational training are essential for sustainable youth empowerment in the Niger Delta. The study identified over 26 vocational skill areas that are needed for youths in the region and also identified inadequate training facilities and acute shortage of trained qualified teachers as major challenges constraining implementation of technical and vocational education training in the region. More so, Godstime and Joseph (2016) reiterated that technical and vocational education especially amongst rural youths in the Niger Delta has the capacity to improve their living standard, self-sufficiency, reduce poverty, and sustain community development. In a separate study, Uranta (2013) examined the effect of capacity building programmes of Shell Petroleum Development Company (SPDC) and Niger Delta Development Commission (NDDC) on the wellbeing of beneficiaries. A total of 300 respondents were sampled from 22 capacity development centers in Rivers and Bayelsa states. The study reported a nominal positive change in the income of

beneficiaries of skill acquisition programme thereby improving the well-being of beneficiaries. Elsewhere, Uranta and Nlerum (2017) comparatively examined the effectiveness of skill acquisition programmes of the Shell Petroleum Development Company (SPDC) and Niger Delta Development Commission (NDDC). The study involved a total of 271 respondents sampled from 22 skill acquisition centers in Rivers and Bayelsa states. Findings from the study revealed that although the socio-economic conditions of beneficiaries from both providers have relatively improved, the skill acquisition programmes provided by SPDC was adjudged to be more effective than that of NDDC. The study identified poor training outcomes due to the utilization of unqualified trainers for NDDC programmes as the major reasons for the non-effectiveness of NDDC skill acquisition programmes. The study hence recommends the use of qualified consultants, effective supervision and monitoring would guarantee effective implementation of skill acquisition programmes in the Niger Delta.

From the foregoing, the empirical literature reviewed so far suggests that rural livelihoods can be enhanced when locals are provided with opportunities to learn new skills and adaptive techniques to cope with their changing environment and to sustain their livelihoods.

Materials and Methods

The study was conducted in 6 oil producing communities in the Niger Delta including Umutu and Kokodiagbene communities of Delta state, Polaku and Ogboinbiri communities of Bayelsa state, with Bille and Bodo communities of Rivers state. Utilizing a mixed method approach, data was collected through the administration of quantitative closed-ended questionnaires and qualitative participatory interviews and focus group discussions. In all a total of 610 households participated in the quantitative survey through the systematic random sampling technique while 72 persons participated in qualitative interviews and focus group discussions. Participants of the interviews and focus group discussions were purposively selected and these include community leaders, youth leaders, women leaders, community development committee executives, community-based organizations and opinion leaders. Data analysis involved univariate and bivariate analysis for quantitative data with the aid of the Statistical Package for Social Sciences software (SPSS, Version 20) and Microsoft Excel (Version 2010) and content analysis was used for the qualitative data. Descriptive statistics and inferential statistics were employed and the hypothesis test employed cross tabulation of bivariate data and test of statistical significance was conducted utilizing the Chi square statistics at the 0.5 level of significance.

Results and Discussions

Socio-Demographic Characteristics of Respondents

The socio-demographic distribution of the respondents as shown in table 1 indicates that out of the 610 respondents who participated in the study, 51.7% of them are men, while 48.2% are women. The age distribution of the respondents from table 4.1 shows that whereas 4.9% of the respondents are within the age category of less than 20 years, 21.3% are within the age category of 20-29, while 31.5% are within the age range of 30-39. Also, while 20.3% are within the age range of 40-49 years, 15.7% are within the age range of 50-59, whereas 6.2% of the respondents above 60 years.

More so, the educational distribution of the respondents indicated that whereas 11.5% of the respondents do not have any form of formal education, 13.4% of them only had primary education. Furthermore, the data shows that while majority of the respondents (52.1%) have attained secondary education, 20% of them have attained tertiary education, while only 3% of the respondents have had one form of vocational education or the other. The occupational distribution also shows that out of the 610 respondents 27.5% are engaged in farming, while 22.3% are engaged in fishing. Also, the data indicates that while 24.6% of the respondents are engaged in one form of petty trade or the other, 7.2% are artisans, 7.9% are civil servants, 3.6%

are either oil company staff or contractors, and 2.3% are engaged in other livelihood activities, while 4.6% of the respondents are unemployed.

Lastly, the income distribution of the respondents shows that out of the 610 respondents 32.5% earn an average income of less than ₦ 10, 000 monthly, while 39% of them earn an average monthly income of between ₦ 10, 000 to ₦ 30, 000. Furthermore, whereas 13.1% of the respondents earn an average monthly income ranging between ₦ 31, 000 and ₦ 50, 000, only 15.4% of the respondents earn an average monthly income ₦51, 000 and above.

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

Access to Skills Acquisition Trainings

Investigation into the availability and access to skills trainings was conducted. Findings from the survey as indicated in figure 1 reveals that whereas 46.6% of the respondents agreed to have participated in a skills training, 53.4% of them reported they have neither had access to nor participated in any skills training programme in their community.

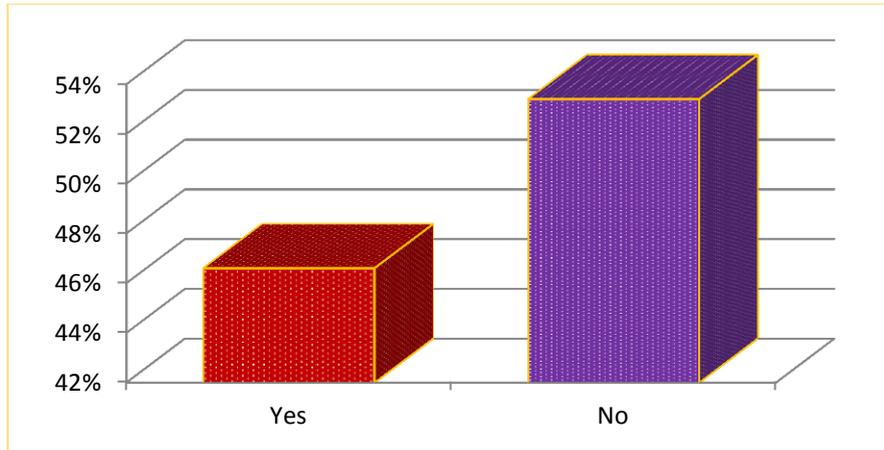


Figure 1: Distribution of Respondents by Participation in Skills Training
Source: Fieldwork, 2018

This tend to show that human capacity building programmes are scarce in the Niger Delta region and even when they are available, majority of the rural populace do not have access to participate in such trainings.

Types of Skills Acquisition Training

Further probe into the type trainings attended by the respondents who reported to have participated in trainings was conducted. Findings from the survey as presented in figure 2 indicates that whereas 36% of the respondents reported to have been trained on various vocational skills, 20% were trained specifically on entrepreneurial development, while 17.2% of the respondents who are women have been engaged in several kinds of skill trainings specifically targeted at women.

More so, whereas 8.6% of the respondents reported to have participated in various kinds of environmental trainings such as gas alert, oil spill cleanup and recovery trainings, 7.9% and 7.2% of them attended several trainings for farming and fishing respectively, while 2.9% of them participated in adult literacy programmes.

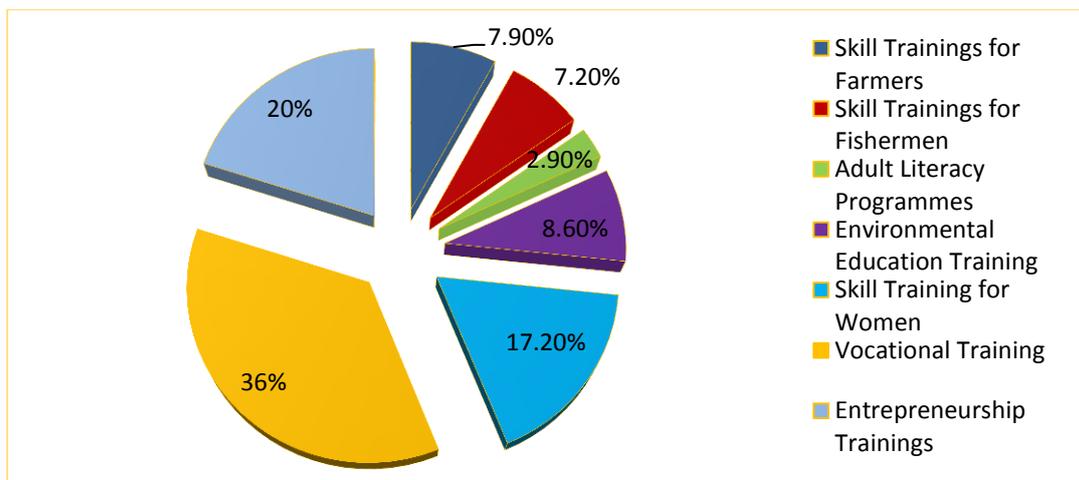


Figure 2: Distribution of Respondents by Types of Trainings Attended
Source: Fieldwork, 2018

Providers of Skills Training

The survey also probed the respondents to ascertain the providers or sponsors of the various trainings they have attended. Findings as shown in figure 3 reveals that whereas 26% of the respondents asserted that the government (especially local and state governments) is

responsible for the trainings they have participated in, 23% revealed trainings they participated in were organized and sponsored by non-governmental organizations.

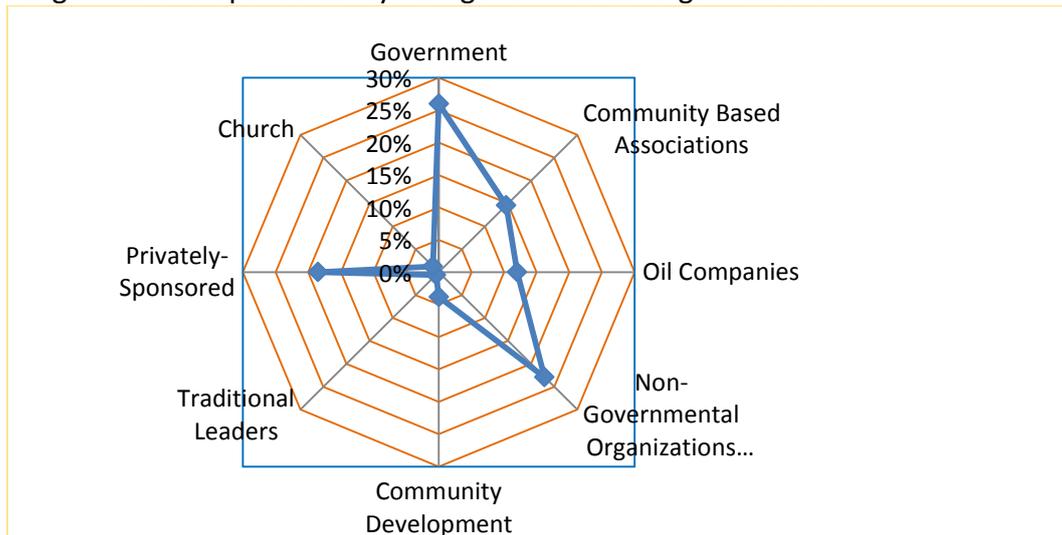


Figure 3: Distribution of Respondents by Skill Training Providers

Source: Fieldwork, 2018

More so, whereas 15% of the respondents reported that community-based associations (such as local cooperative societies and social clubs) are responsible for the trainings they have attended, 12% reported that oil companies operating in their communities are responsible for organizing and sponsoring such trainings, while 3.8% of the respondents reported that the community development committees (CDC) in their various communities are responsible for such trainings.

In addition, while 0.6% of the respondents reported that the trainings they attended were sponsored and organized by the traditional leadership in their communities, 1.27% of them revealed that the trainings they attended were put together and sponsored by their churches. Nonetheless, 19% of the respondents argued that the skills training they have acquired were sponsored directly from their private pockets or by their relatives. This tends to show the place of individual agency in promoting adaptive capacity amongst the Niger Delta people as evident in their resilient spirit and strong will to better their lot even when faced with precarious situation arising from oil and gas pollution.

Test of Hypothesis

To ascertain if there is a relationship between access to skills training and household income levels, a cross tabulation of respondents’ participation in skills training and their average monthly income was conducted as shown in table 2.

Results indicate that whereas 30.3% of those who have participated in skills training earn below ₦ 10,000, 38.7% of them earn between ₦ 10,000 - ₦ 30,000, while 16.9% of them earn between ₦ 31,000 - ₦ 50,000 and 14.1% earn above ₦ 51,000. On the other hand, whereas 34.4% of those who have not participated in a skills training earn below ₦ 10,000, 39.3% of them earn between ₦ 10,000 - ₦ 30,000, while 9.8% of them earn between ₦ 31,000 - ₦ 50,000 and 16.5% earn above ₦ 51,000.

Table 2: Cross Tabulation of Skills Training by Household Income Levels

Participation in Skills Training	Average Monthly Income of Respondents				Total
	Below ₦ 10,000	₦ 10,000 – ₦ 30,000	₦ 31,000 – ₦ 50,000	₦ 51,000 and Above	

Yes	Count	86	110	48	40	284
	Expected	92.2	110.8	37.2	43.8	284.0
Count		112	128	32	54	326
	No	Count	105.8	127.2	42.8	50.2
Count		198	238	80	94	610
	Expected	198.0	238.0	80.0	94.0	610.0
Total	Count					
	Expected					
Count						

Source: Author's Computation Based on SPSS Output (2018).

In view of the foregoing analysis, in order to test if participation in skills training is associated with income levels of households, hypothesis 3 was tested using the Chi Square statistics at the 0.5 level of significance on the SPSS software.

H_0 : There is no significant relationship between participation in skills training and levels of income amongst households

Table 3: Chi Square Tests for Hypothesis

	Value	df	Assymp. Sig. (2 – sided)
Pearson Chi Square	7.203 ^a	3	.066
Likelihood Ratio	7.207	3	.066
Linear - by - Linear Association	.550	1	.458
N Valid of Cases	610		

Asymptotic significances are displayed. The significance level is .05

Source: Author's Computation Based on SPSS Output (2018).

Table 3 showing the result of the chi square statistics test for hypothesis 3 indicates $X^2(3, N = 610) = 7.203, p = .066$. Going by our result, since the p value 0.06 is greater than 0.05, the test is statistically not significant; hence we fail to reject the null hypothesis. This implies that there is no significant relationship between participation in skills training and household income levels. Drawing from the foregoing, it becomes deducible that levels of household income do not significantly differ between respondents who have participated in skills training and respondents who have not participated in skills training.

Reasons Why Skills Training Fail to Improve Income Levels

Further investigation revealed that there are several reasons why skills training do not translate into increased income and better livelihoods for households. Firstly, it was discovered that most trainings are not accompanied by starter packs such as materials or finances which would enable them apply the skills they have attained. As a result, most beneficiaries do not practice skills they have acquired due to lack of finances to purchase the needed materials. Addressing this issue, the participants of the male focus group discussion in Bodo community asserts thus:

“We have had some skills training in our community; however, persons are still wallowing in poverty. This is because most training come without empowerment such as starter packs either in the form of tools or cash. Also, beneficiaries can be attached to a company or a group of persons that is already doing that business as interns so that they can get a little money from there to start their own businesses, and even train and employ other people” FGD/Male/Bodo/2018

Aside the issue of inaccessibility to starter packs for training beneficiaries, their efforts at applying the skills they have acquired is further constrained by the poor infrastructural realities in their communities. This position was addressed by the Youth President of Kokodiagbene community when he asserts thus:

“We do lack access to skill acquisition in this our community and even when government or oil companies train our people most of the times the training are not productive... For example many young men and women in this community have learnt skills on welding, barbing, hair dressing, computer and so on but because we don’t have electricity in the community they cannot even do the business.” KII/Male/Youth President/Kokodiagbene/2018

In addition to the above, the respondents further argued that most of the times the duration of trainings conducted in their communities are rather too short for participants to internalize and apply the skills in their daily livelihood activities. Expressing this view, the President of the Bille Women Forum asserts thus:

“For example, we made request to Eroton to provide this skill acquisition on sewing, bead making, computer training and hair dressing for our women but what they said is that they don’t want to train people again because when they train due to the fact that the training time is so short, the people can’t make use of the training. In this situation even if beneficiaries are provided starter packs, since the training is not enough, they are not making use of them”.
KII/Woman/President, BWF/Bille/2018.

Drawing from the foregoing, the study has shown that access to skills training in itself do not enhance the livelihoods and income of the people in the study communities. This implies that for skills training and human capital development initiatives in general to be an effective tool in promoting livelihoods and resilience in the Niger Delta region, skills trainings should be more intensive and practical enough and accompanied with starter packs so as to ensure the applicability of these trainings by the beneficiaries.

Conclusion

The study addressed the role access to skills acquisition plays in enhancing the rural household income and livelihood resilience in oil impacted communities of the Niger Delta region. The study has shown that most respondents in the study communities do not have access to skills acquisition and the few that have benefited from such interventions got such mostly from community-based organizations, religious groups and government. This notwithstanding, the study revealed that access to skills training in itself do not improve household income level mostly due to absence of starter packs, non-intensive nature of the trainings, short training durations, poor infrastructural realities in the communities and absence of productive economy to absorb provide job opportunities for beneficiaries of skills training. In view of the findings of the study, the study hence concludes that in the absence of these aforementioned factors, access to and participation to skills training do not in it self improve household income levels and by extension livelihood resilience. What is more important is the post-training opportunities available for beneficiaries to put into practice the livelihood skills they have acquired to pursue profitable ventures, increase their livelihood portfolios and sources of income.

Recommendations

Based on the findings of the study, it is recommended that opportunities for livelihood skills acquisition should be enhanced in the Niger Delta. More so, skills that are directly related

to the socio-economic realities of the communities should be encouraged as such skills would directly meet the needs of the local economy and increase productive activities in the communities. Lastly, providers of livelihood skills interventions should ensure training programmes are intensive enough for proper skills and technology transfer while providing opportunities for starter packs and other incentives that would promote the utilization and sustainability of such schemes must be ensured.

References

- Akpama, S.I., Esang, O.U., Asor, L.J., & Osang, W.O. (2011) Non-Formal Education Programmes and Poverty Reduction among Young Adults in Southern District, Cross River State, Nigeria. *Journal of Education and Development Psychology, 1*: 56-67.
- Amadi, O.B., & Abdulla, H. (2012). Perception of Capacity Building among Youths involved in Vocational Skills Development. *Journal of Social and Development Sciences, 3*: 214-221
- Arild, Angelsen., Sven, Wunder., Ronnie, Babigumira., Brian, Belcher., Jan, Börner., Carsten, Smith-Hall (2011). Environmental incomes and rural livelihoods: a global-comparative assessment. Paper presented at the 4th Wye Global Conference, Rio de Janeiro, 9.-11. November 2011.
- David, S., & Asamoah, C. (2011). The Impact of Farmer Field Schools on Human and Social Capital: A Case Study from Ghana. *Journal of Agricultural Education and Extension. 17* (3), 239-252.
- Dubey, P., Bhadra, B.T., & Santra, S. (2015). Role of Human Capital for Changing Livelihood Pattern: A Case Study in Nadia District of West Bengal. *International Research Journal of Social Sciences, 4*(4), 98-104.
- Egbe, A.A., Usang, E., Amimi, P.B., Ndifon, E.O. (2011). Entrepreneurship Empowerment and Gainful Employment: Panacea for Youth Restiveness in the Niger Delta Region of Nigeria. *African Research Review, 5* (1)107-118.
- Ezeji, V.O; & Okorie, B.Y. (1999). Skills Acquisition and Natural Development. *Development Series Journal 5*: 332- 345.
- Godstime, T.C., & Joseph, A.O. (2016). The relevance of Technical and Vocational Skills Acquisition Programme in the Development and Empowerment of Rural Youths in Niger Delta Region, Nigeria. *J. of Scientific and Engineering Research, 2016, 3*(6):473-478.
- Homer-Dixton, T.F. (1999). *Environment, scarcity, and violence*. Princeton: University Press.
- 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.
- Kadafa, A. (2012). Oil Exploration and Spillage in the Niger Delta. *Civil and Environmental Research, 2* (3), 38-51.
- Kadiri, S. J., & Oriazowanlan, A.O. (2009). Career/Vocational Guidance: An Antidote to Vocational Choice and Skill Acquisition in Nigerian Schools. Being a paper delivered at the national conference on skills acquisition in Nigerian education system: Problems and prospects.
- Ojimba, T.P., Akintola, J., Anyanwu, S., & Manilla H. (2014). An Economic Analysis of Crude Oil Pollution Effect on Crop Farms in Rivers State, Nigeria. *Journal of Development and Agricultural Economics, 6*(7), 290-298.
- Okaba, B.O. (2005). *Petroleum Industry & the Paradox of Rural Poverty In The Niger Delta*. Benin City: Ethiope Publishing Corporation.

- Okon, R.N & Egbon, P.C (1999). *Fiscal Federalism and Revenue Allocation: The Poverty of the Niger Delta*. NES Selected Paper Presented at the 1999 Annual Conference.
- Okwelle, P.C., & Deebom, M.T. (2017). Technical Vocational Education and Training as a Tool for Sustainable Empowerment of Youths in Niger Delta, Nigeria. *International Journal of Innovative Social & Science Education Research* 5(1):29-38.
- McCarthy, D. P., Crandall, D. D., Whitelaw, G. S., General, Z., & Tsuji, L. J. (2011). A Critical Systems Approach to Social Learning: Building Adaptive Capacity in Social, Ecological, Epistemological (SEE) Systems. *Ecology & Society* 16(3): 18.
- Oghiagbephan, A.D. (2016). Poverty Reduction and Sustainable Development in the Niger Delta Region of Nigeria: Strategies for Counseling. *Journal of Applied Management Sciences*, 2(5), 71-86.
- Robinson-Pant, A., (2016). Learning Knowledge and Skills for Agriculture to Improve Livelihood. United Nations Educational, Scientific and Cultural Organization.
- Uloko, M.E., & Ejinkonye, U.B. (2010). Entrepreneurial Education and Training for Job Creation. *Journal of Teacher Perspective* pp. 308-314.
- United Nations Development Programme (UNDP) (2006). Niger Delta Human Development Report. Abuja: UNDP.
- Uranta, D. (2013). Effect of Capacity Building Programme of Development Agencies on Well Being of Beneficiaries in Niger Delta Nigeria. *J. of Sociological Research*, 4(2),351-358.
- Uranta, D., & Nlerum, F.N. (2017). Effectiveness of The Skills Acquisition Programme of SPDC and NDDC. *Journal of Humanities and Social Science*, 22 (4), 1-6.
- Veeranjaneyulu, K., Krishnaveni, G., Lakpathi, G., & Rajanikanth, P. (2014). Skill Development and Enhanced Livelihood Opportunities through Apparel Making & Embroidery Trainings KVK, Kampasagar, Nalgonda District. *International Journal of Scientific & Technology Research*, 3(1), 6-10.
- Zabbey Nenibarini (2009). *Impacts of Oil Pollution on Livelihoods in the Niger Delta*. Paper presented at the conference on "Petroleum and Pollution – how does that impact human rights? Co-organized by Amnesty International, Forum Syd and Friends of the Earth, Sweden. At Kulturhuset, Stockholm, Sweden, April 27, 2009.