

Technical collaboration in international environmental assessment projects: a case study of the UNEP Environmental Assessment of Ogoniland Project

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Abstract

Environmental Assessment projects range from very simple local projects involving the investigation of a single site to large and more complex international projects involving multiple locations; investigating multiple environmental media; and executed by a multi-cultural project management team. In the case of a post impact assessment survey, the goal is to gain access to impacted sites; collect relevant data; analyse the data and produce a report. In real life situations however, such a simple description does not match the complexity of the process as observed in actual field operations. The socio-economic and socio-cultural environment in which a project takes place presents its own challenges to a project management team and an understanding of the expectations of local community which is a key success indicator. In the absence of working knowledge and understanding of local expectations, complex international projects may depend on joint working relationships between independent bodies in the form of collaborative partnerships to achieve their set goals. Using this approach, the planning and implementation of the project's activities becomes joint responsibility of the partners and which may lead to the creation of new organizational structures and new implementation processes. This paper reviews the Technical Collaboration Partnership between the Post Conflict and Disaster Management (PCDMB) of the United Nations Environment Programme (UNEP) and the Rivers State University of Science and Technology (RSUST), Nigeria in the Environmental Assessment of Ogoniland Project, in Nigeria (2009 to 2011). The review adopts a philosophical framework



that is grounded in phenomenology; a qualitative case-study research strategy and participant observation as the primary data collection method including content analysis of field notes. The findings indicate changes to normative operational procedures as a result of the partnership and recommends replication of this approach in similar international EIA projects, particularly in developing countries.

Keywords: environmental assessment, project management, technical collaboration, EIA, Partnerships, socioeconomics, international projects, Ogoniland Project.

1 Introduction

In July 2006, the United Nations Environment Programme (UNEP) received a formal request from the Federal Government of Nigeria (FGN) to carry out a comprehensive assessment of the environmental and public health impacts of oil contamination in the four Local Government Areas (LGSs) of Ogoniland, and to suggest options for remediation and clean-up. Following protracted delays to the smooth take-off of the project; in excess of two years, the UNEP led Environmental Assessment of Ogoniland Project, otherwise called The “UNEP Ogoniland Project” effectively took off on a formal note with a training workshop held at the Rivers State University of Science and Technology (RSUST) on the 12th of October, 2009. The mandate and scope of the project was the assessment of soil contamination, groundwater contamination, surface water and sediment contamination in the creeks; adverse impacts on ecosystem due to oil related pollution from oil field infrastructure and activities. Other aspects of the study included exploration of potential changes to surface hydrology, vegetation; potential changes in agricultural productivity and fisheries due to contamination of soil, surface water and groundwater; possible impacts to public health and property due to oil field fires. In February 2010, UNEP entered into a Project Cooperation Agreement (PCA), RSUST-Department of Estate Management (RSUST/EM), for the purpose of *providing support services* in respect of the “UNEP Environmental Survey of Ogoniland, Nigeria”. Collaborative activities which were jointly identified at the onset of the cooperation formed the basis of the services which RSUST/EM rendered in support of the Project which forms the basis of this case study. The PCA with RSUST/EM was executed following UNEP’s recognition of RSUST as one of the leading academic institutions in the Niger Delta with regards to natural resources management and land access – two paramount issues, which had to be adequately addressed in order for the Ogoniland Assessment Project to succeed.

The cooperation allowed the parties to transfer skills and competencies related to the project as well as general capacity building in the field of sustainable management of natural resources. With the endorsement and operation of the PCA, RSUST/EM became the primary project implementation partner of UNEP during the “UNEP Ogoniland Project. Throughout the project, UNEP relied on RSUST/EM as its instrumental partner who facilitated interactions between various stakeholders of the project namely; the UNEP



project management team; government entities; academic institutions; MOSOP; NGOs and local communities in Ogoniland. RSUST experts participated in various thematic areas which were led by UNEP International Experts according to individual qualifications, skills and expertise. Adhering to the multifaceted Terms-of-Reference (see section 3.3), RSUST provided the required support and assistance in virtually all aspects of the project, and where necessary, engaged staff of other relevant institutions like the Rivers State Polytechnic and the University of Port Harcourt to facilitate the work.

2 Literature review

2.1 Collaborative partnerships

Collaboration can take the form of joint ventures in the business world (Rounthwaite and Shell [1]) and it offers several advantages by bringing several perspectives to the discussion. Liyanage and Mitchell (1994) (cited in Pecas and Henriques [2]) refer that collaboration between academia and industry remains dependent upon cultural, organizational and management characteristics of the organizations involved in the process. Depending on the type of project, there is not one common definition of success. It is based on what a project has set out in its aim and objectives and more importantly, recognizing the fact that different people may judge the same project to be successful or unsuccessful (Turner [3]). Collaborative business relationships including strategic alliances, joint ventures, clusters and consortia are popular mechanisms for dealing with resource constraints, accelerating technological advancement (Palakshappa and Gordon [4]) amongst other benefits. Hamel (1991) (cited in Palakshappa and Gordon [4]), conducted a study to understand the extent to which collaboration could lead to a redistribution of skills among partners and identified three important determinants of learning within collaborative relationships: intent, transparency and receptivity. The intention or purpose of establishing the collaboration, the level of transparency of skills of either partner and the openness of each organization in the partnership to learn from each other are all vital in the overall success of a collaborative partnership. According to (Shelbourn *et al.* [5]), there are many factors that are likely to influence the success or failure of working collaboratively and it is important to realize that no two collaborations progress in exactly the same way. However the peculiarities of each particular project can provide learning outcomes for replication. (Shelbourn *et al.* [5]), recognize six key areas as being critical in collaboration, as vision; trust, stakeholder engagement; communication; process and technologies. Information sharing is also recognized as a key requirement for collaborative interorganizational relationships (Sheu *et al.* [6]). According to Doz and Hamel (1998) (cited in Ingirige and Sexton [7]), alliances provide opportunities for individuals terms and firms to gain mutual benefit from sharing skills and resources.

The objectives of collaborative partnerships for each party can be quite different. In academia, collaborative partnerships with industry or other



organizations are viewed as rich sources of information for further research and academic publications. The success of collaborations between companies and universities (Sampson, 2007) (cited in Philbin [8]), can be highly contingent on the performance of information flow between the collaborators. Collaboration requires individual participants to adopt simplified standardized solutions based on common architectures and data models (Horvath [9]). Usually, collaboration enables participants to build capacity to complete a set of tasks that one sole organization would find difficult to achieve. To be successful, collaboration must be robust and correctly focused. Alliances such as that between UNEP and RSUST/EM are voluntary initiated cooperative agreements that involve exchange (Ingirige and Sexton [7]), sharing, or co-development. The UNEP Ogoniland Project by design and execution was a complex project and the fundamental principles of project management were at work throughout its duration. It benefited immensely from collaborative partnerships using an innovative approach that can be replicated to other similar project scenarios. In the field of Project Management, projects are successfully delivered through a process which involves contributions and participation of several parties. In order for a project to succeed, there are two components of project success, project success criteria and project success factors.

2.2 Project success criteria

Project success criteria refer to the qualitative and quantitative measures against which a project is judged to be successful and are dependent variables by which success is judged. Success criteria include the fact that it gives satisfaction to the financiers; achieves its purpose; satisfies the project owner, sponsors; customers and users as well as the project team. Project success factors on the other hand, are those elements which can be influenced to ensure the chance of a successful outcome and are independent variables through which we influence the achievement of project success. The critical success factors in the Ogoniland Project can be linked to its project management structure (Kakulu *et al.* [10]) and the use of partnerships. When managers contemplate entering into a partnership arrangement (Trim and Lee [11]), they need to think in terms of what constitute critical factors. Compatibility, commitment, communications and common aims (Lawton Smith and Dickson, 2003) (cited in Trim and Lee [11]), can constitute critical factors. One of the strengths in entering into partnerships is that a hybrid organizational structure is formed that is distinct and different from the initial separate groups of persons who come together to form the partnership. Collaborative partnerships benefit from the merging of ideas and experiences and formation of new organizational cultures. New partners (Trim and Lee [11]) bring with them different types of information that can lead to a broadening of an organizations scope and organizational value systems merge thus promoting temporary change in identity of an organization during the period of the partnership.

3 A case study on the UNEP Ogoniland Project

3.1 Methodology

A case study methodology was used and in-depth review of the collaborative partnership between RSUST and UNEP in the UNEP Ogoniland Project. Practical outcomes of the collaboration and prospects for replication in the future are also highlighted. Flowing from the terms-of-reference establishing the cooperation between UNEP and RSUST/EM through to its completion, there are learning outcomes which this paper seeks to highlight. Data is grounded in a series of project review meetings and progress reports which the authors contributed to as participants. Thus participant observation is the main data collection strategy adopted in this study.

3.2 The Ogoniland Project

Between October 2009 and August 2011, UNEP conducted a scientific assessment of Ogoniland and collected in excess of 4000 samples from more than 200 sites in the disciplines of contaminated land, forestry and agriculture, fisheries and the aquatic environment, socio-economics and public health. Extensive use was made of satellite images, photographs, interviews, physical samples backed by laboratory analysis and expert data management and analysis to build a picture of the state and extent of oil pollution in the area including historical impacts on health impact of drinking water, impact on livelihoods, depth and spatial extent of contamination as well as interactions between these phenomena. The UNEP project team surveyed 122 kms of pipeline rights of way and visited all oil spill sites, oil wells and other oil-related facilities in Ogoniland, including decommissioned and abandoned facilities, that were known and accessible to UNEP during the fieldwork period, based on information provided by the Government regulators, Shell Petroleum Development Company (Nigeria) Ltd (SPDC) and community members in and around Ogoniland (UNEP [12]).

The UNEP Ogoniland Project involved fieldwork using multi-disciplinary scientific teams which carried out site assessment and collected samples of water, soil, sediment, air quality, plant and animal tissue followed by laboratory analysis. Many stakeholders were involved in the project, including Nigerian officials at the Federal and Rivers State level, traditional rulers and chairmen of the four Ogoni local government areas, women and youth leaders, land holders, universities, polytechnics, NGOs, health Centres' and laboratories. The project was undertaken by UNEP with assistance from the United Nations Development Programme (UNDP). The project funding was negotiated to ensure the independence and integrity of the assessment. In line with the polluter-pays principle, the government, the Shell Petroleum Development Company (SPDC) of Nigeria and UNEP agreed the US\$9.5 million project cost would be borne by SPDC (a joint venture between the government, Shell International, Elf/Total and Agip). A Presidential Implementation Committee (PIC) monitored the



project while a Community Consultation Committee (CCC) advised UNEP project team and articulated inputs/concerns from the local communities. The CCC also served as a bridge between the people and UNEP.

Extensive preparation, which included frequent consultation with local communities, served to build trust between the multi-national assessment teams and the Ogoni people. The assessment findings were published in a report on August 4th (see <http://www.unep.org/nigeria/>), which was generally well received despite its hard-hitting nature. In fact, the UNEP assessment has been extolled as a cost-effective alternative to the adversarial approach used in similar complex situations where communities, environment and corporate interests are seemingly inextricably entangled: *“the UNEP Report is a brilliant model for fact-finding, whatever the fate of its grand proposals. Funded by Shell Nigeria but conducted by the U.N. with peer scientific review, the 14-month, \$10 million, 4000-sample UNEP Report took a fraction of the time and money of the adversarial assessment conducted by Chevron and its foes in Ecuador, and—miracle of miracles—yielded authoritative results”*.

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3.3 Nature of the cooperation between UNEP and RSUST

An extensive, complex and multifaceted project cooperation agreement (PCA) was executed between UNEP and RSUST/EM and the implementation of the UNEP Ogoniland Project. Extracts from the Terms-of-Reference (TORs) are outlined below as follows:

1. Applying the use of local expertise and knowledge to provide UNEP's project management (PM) team with political, institutional and social guidance and advice; identification and interface with relevant community groups and NGOs operational within the Ogoni communities and participation in the initial “ground-truthing” exercise.
2. Assisting with negotiating land access; participation in technical meetings with UNEP's PM team and project specialists for designing the field assessment work and with the provision of field training and workshops for UNEP's national staff and staff from national counterpart institutions.
3. Production of desk studies, relating to areas impacted by oil exploration and production and the establishment of base-line data from selected sites not previously impacted by oil exploration and production operations; design and execution of some of the technical protocols used for undertaking the scientific study in a few RSUST led sectors; and the quantifying and identifying the geographical extent of contamination/impact from oil exploration and production activities within all relevant media.
4. Assist UNEP with the assessment of the changes in biodiversity and productivity within the agricultural and fisheries sectors; undertaking of, public health and case study interviews; designing and implementing several awareness-raising initiatives to reach all sections of local



- society; provision of periodic input to UNEP communication team and participation in regular community consultation committee meetings.
5. Provision of sampling support and logistics to convey the students to the field on a daily basis; engagement of local youth to work with the university team on a daily basis and provision of security personnel and additional police to cover routine operational and field activities; provision of support to community nominated representatives that were present during all field activities and the “sample custodians” who were charged with collecting, packing and shipping field samples to laboratories abroad as well as laboratory services for Soil Microbiology analysis.
 6. Provision of regular and periodic feedback to the UNEP project management team on the progress against the ToRs.

These activities were implemented over the life of the project and some of them are explained in more detail in subsequent sections.

4 Collaboration activities

4.1 Political, institutional and social guidance

RSUST facilitated the interface between UNEP’s Project Management Team and the Rivers State Government; the traditional rulers, Local Government Chairmen, and other stakeholders. Through continuous dialogue, the application of local knowledge and the experience of the RSUST team, several potential conflict areas were avoided. RSUST visible presence at all town-hall and public meetings improved the overall receptivity of the Ogoni’s as well as the Government and people of Rivers State. The UNEP Project Management team initiated a standing Community Consultation Committee (CCC) to deepen and enhance the active participation of key stakeholders and partners. The CCC was a monthly forum for open discussion and exchange of ideas, including concerns from stakeholder constituencies, advice to UNEP and make recommendations to the Presidential Implementation Committee (PIC) – the principal decision making body of UNEP Environmental Assessment of Ogoniland Project. RSUST/EM was very active in the CCC and was well represented. In several cases, the RSUST team undertook and led high-powered “*Door-Opening*” missions that averted several bureaucratic stalemates and bottlenecks that arose in the course of the project. RSUST project team members participated in weekly and routine and technical project meetings. Several suggestions, constructive criticisms and useful contributions were made on a regular basis from the University team to UNEP’s project management team and international experts, whenever or wherever this was required at every stage throughout the life of the project.

4.2 Training workshops desk studies and establishment of baseline data

RSUST collaborated in several training workshops throughout Ogoniland the project life span. An initial inaugural workshop was held to prepare the team for



the ground-truthing and Reconnaissance phase of the project. A four-day 'Sampling Methodologies' workshop which involved wider international and national participation ahead of the Sampling Phase. Sampling Field Training was organized jointly by UNEP and RSUST for the students who were recruited to work with the contaminated land team as sampling field assistants. An end-of-project workshop held in December, 2010 which marked the official end of the sampling phase. The national experts on the RSUST team produced a number of desk studies thus bringing to bear a significant amount of local knowledge to the international team, in exchange for the wealth of experience and skills possessed by the internationals. The desk studies covered contaminated land, biodegradation of oil and oil products; long-term effect of spilled crude in several places. The hydrology in the Ogoni Section of the Niger Delta and the Hydrogeology of the Niger Delta formed part of the desk studies. Also covered in the desk studies was a summary of literature on large and complex oil spills in the Niger delta. The Ministry of Water Resources and rural development also provided a baseline survey of drinking water sources while RSUST national experts provided a meteorological review of Ogoniland and existing information on air quality. Desk studies on public health from part of the collaboration. The land ownership structure; use of water bodies and fishing rights in the study area 4 Ogoni LGAs was also documented. An interview report on the Social structure of Kings and Chiefs of the Ogoni People was also conducted. Desk study reports on fisheries, forestry and agriculture were compiled by both the RSUST fisheries; forestry and agriculture expert teams. These desk studies provided useful insight at the commencement of the project. Working closely with the international experts and using RSUST laboratory facilities and local knowledge, RSUST expert teams identified sites and selected sites not previously impacted by oil exploration and production operations. Sites in Okwale, Oyigbo and outside Rivers State were identified. Health reports and federal government health statistics were provided where needed in support of the field teams.

4.3 Geo-referencing and awareness raising

In the absence of detailed land use maps RSUST teams visited and geo-referenced hundreds of community wells and drinking water sources in the 4 Ogoni LGAs. Places of interest were also identified and geo-referenced and all the gathered information fed into the project database. UNEP data management team verified this data which was used to update different project maps. One of the success factors of the UNEP Ogoniland Project was effective communication with the local communities, traditional rulers, key stakeholders, the federal and Rivers State governments and their agencies, and partners both horizontally and vertically. The RSUST team provided invaluable inputs to shape the content and context of the UNEP's communication tool. In addition, the RSUST team worked productively with UNEP's Geneva Communications Unit, UNEP's Communications Adviser (Port Harcourt), the 4 UNEP CLAs for the 4 Ogoni LGAs, and especially with local youths whose capacities were transformed and strengthened and who helped in creating awareness and acceptance for the project in the communities.



4.4 RSUST expert teams and activities

Land access constituted one of the paramount issues which needed to be adequately addressed in order for the UNEP Ogoniland assessment project to succeed. RSUST Land Access Team (LAT) members participated in the development of a community entry strategy involving a logical step-by-step procedure for community entry during both the ground-truthing and sampling phases of the project, see (Kakulu and Nuhu [13]). Working closely with the UNEP project management team, the “field entry strategy” was developed to ensure unhindered access to oil spill sites, carry out necessary assessment and collect samples for laboratory analysis. The strategy for field entry involved a four-step field work procedure in order to allow for smooth transition and flow of field activities as well as guarantee zero-conflict in the communities, especially among landholders and areas where there are existing land disputes. The community entry protocol was based on an understanding of the traditional land access practices in Ogoniland. Thus, the role of RSUST LAT in the scientific study was very critical to the entire team’s entry to spill sites in Ogoniland. LAT members, negotiated with appropriate community contact persons, youth leaders thus ensuring that the UNEP teams could gain access to the contaminated sites for assessment, and made all required financial compensation relating to site access and site clearance in a professional manner. Members of the Land Access Team also assisted in the verification and updating of the remote sensing material and maps, produced by UNEP experts.

The RSUST Contamination Land Team participated in the collection of soil, sediment and water samples for laboratory analysis. The team assisted in collecting soil, water samples and sediment samples from the field for shipment to various laboratories (international and national,) for analysis. The Fisheries and Aquatic Team assisted and supported the UNEP studies in collecting water and marine samples. They also as offered quality advice on the species of fish in Ogoniland and those that have been adversely affected by oil spills based on previous studies in the Niger Delta. The RSUST Public Health team provided useful practical health and safety tips that guided UNEP’s field missions throughout the project. The team also facilitated field visits of the public health and air quality thematic group as well as accessing records in target healthcare centres and hospitals in the 4 Ogoni LGAs and within Port Harcourt City and its environs. They also assisted the UNEP team in organizing and arranging records collected from hospitals and healthcare centres into manageable data for analysis. With tremendous theoretical and practical experience, the RSUST Forestry and Agricultural Team provided UNEP’s international and national staff/consultants with relevant background literature and useful advice on plants and livestock in Ogoniland and in the Niger Delta. They assisted the UNEP team to source and collect hundreds of plants and livestock samples in contaminated areas of Ogoniland and elsewhere in neighbouring Imo State for control-samples. Also, the tissues of these plants and livestock samples were analysed by experts in relevant laboratories at the RSUST.



4.5 Data management, topography survey and sampling support activities

RSUST played a lead role in the topographical survey to establish the elevations of drilled water quality monitoring wells, managed the logistics of this activity and established the ground elevations for 142 water monitoring wells. RSUST worked with consultants and were in the field to cover all sampling activities during which they worked closely with the UNEP Community Liaison Assistants (CLAs), community contact persons and identified five to six local labours from the community to work alongside the students. RSUST provided a team of 3 (three) sample Custodians who worked with the UNEP sampling team. The sample custodians, who were office based, were fully involved in sample management activities. They received samples from the field teams, documented the samples and prepared them for shipment. Samples were packed and labelled, and Chain of Custody forms were also prepared. The sample custodians were also responsible for preparing de-ionized water and ensuring that there was sufficient quantity to go into the field on a daily basis. All samples (soil, sediment, water, air quality, plant and animal tissues, etc.) collected in the field were sent to internationally accredited laboratories for analysis.

5 Benefits of the collaboration

In the area of collaboration, the Ogoniland Project provided ample opportunity for knowledge exchange between the partners. Working with a large team of counterparts, the international experts could focus on bringing their skills and expertise to the table without being distracted by issues which were possibly better handled by the national experts. From an academic perspective, the authors can confirm that the collaboration and the involvement of several persons from within the university has opened up new frontiers of research and academic publications. Collaboration calls for a merging of ideas and a great deal of flexibility is required. The flexibility on the part of UNEP led to the initiation of pilot studies on livestock sampling and analysis. Pilot surveys were conducted in each of the four Ogoni LGAs and it is expected that following extensive peer review, the findings will be disseminated as academic publications in conferences and through academic journals. Pilot studies were also conducted on the perception of local farmers on the effect of long term soil contamination on their farming practices (see Kakulu and Nuhu [13]).

6 Conclusion

The UNEP Ogoniland Project within the context of project success, achieved its purpose in the production of a credible environmental assessment report with strong recommendations for clean-up and remediation. The project success factors included the setting up of Technical collaboration partnerships with local institutions which facilitated knowledge exchange between the International team and national experts which this paper addresses. Collaborative partnerships provide an opportunity for acquiring new skills and competencies through



participation in a relationship. The purpose of the collaboration was clearly one of knowledge transfer and this was achieved by both parties in the collaboration. The training workshops provided ample opportunity for learning new skills and this was further enhanced by actual participation on daily field activities. While the picture may appear somewhat rosy in the end, the initial friction between parties holding on to their convictions was very challenging to the project management team. Subsequently however, with the merging of ideas and several project briefings and meetings, grey areas became sorted which allowed gradual refinement of the process. Replication of this pattern of international collaboration is strongly recommended by the authors who were also participant observers.

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