

Research Paper

**PLANNING AND EXECUTION OF THE
EUROPEAN UNION-ASSISTED WATER SUPPLY
AND SANITATION PROJECTS IN IMO STATE,
NIGERIA: CONSTRAINTS, LESSONS AND
SUCCESS FACTORS**

ABSTRACT

This paper analyses constraints, lessons and success factors, in the planning and execution of the European-Union Micro-Projects Programme on water supply in Imo State, Nigeria. The questionnaire was employed for data collection. From the results, the constraints indicated by the respondents are inadequate community involvement, sourcing of funds, reliance on top-down approach to water project delivery, inadequate distribution of sufficient surface/ground water, inappropriate cost recovery system, irregular functioning of installed facility, and inadequate local built-up capacity. It was also observed that the lessons indicated by the respondents are community involvement process, project delivery process, knowledge of project outcomes/benefits, operation and maintenance of projects, sense of project ownership, process of building capacity, and new project identification. Whereas the success factors indicated by the respondents are; inclusiveness of all socioeconomic groups, equitable sharing of costs and responsibility, stimulated timely delivery of project services, sustained achievement of project objectives, guaranteed equitable distribution of project benefits to all socioeconomic groups, promoted sense of project ownership, and stimulated new project identification. The paper concludes that the above factors provide feedback on the effectiveness of the EU-MPP6 externally-funded projects and they also provide the basis for formulating strategies for improving development projects in the future.

Keywords: *Constraints; water projects; European Union; planning*

1. INTRODUCTION

In Nigeria, public water supply started early in the twentieth century in seven towns under the management of the lowest administrative level (Imo State Government, 2006). In 1950, maintenance of water supply schemes came under the Regional Governments. By 1966, State Water Boards/Corporations had begun to emerge. Today, all the 36 states of the federation and the Federal Capital Territory have Water Boards/Corporations or Public Utilities with their efforts being supplemented,

in many cases, by the Local Governments. Federal Government got involved in the management of water resources in 1976 when the Ministry of Water Resources and the eleven River Basin Development Authorities (RBDAs) were created. The ministry's responsibilities are to: formulate national policies in the development and management of water resources in the country, coordinate the activities of the States in matters of water resources development and management as well as to act as a guarantor to States in matters of external borrowing to fund water projects. The RBDAs, on their part, are to provide bulk water primarily for irrigation (NEST, 1991). Shortly after in 1981, the United Nations Education Fund (UNICEF)-Assisted Programme in Rural Water Supply and Sanitation (RUWATSSAN) was initiated and implemented. As part of the continued efforts to improve the water supply and sanitation, the Federal Government of Nigeria, in January 2000, launched its National Policy on Water Supply and Sanitation. The main objective of the policy is to provide sufficient potable water and adequate sanitation to all Nigerians in an affordable and sustainable manner. The policy strategy emphasizes participatory investment by all actors: the government, the private sector and the beneficiary community in the provision of water and sanitation (Federal Republic of Nigeria, 2000).

With the creation of old Imo State in 1976, the defunct Imo State Water Corporation inherited forty-five water schemes from the East Central State Water Cooperation with an average production capacity of barely 20 litres daily per person (Imo State Government, 2006). In recognition of the inadequacy of water supply at that time, a master plan for Regional Water schemes for seven urban areas was proposed. Amongst the seven urban areas then, only three (Owerri, Orlu and Okigwe) are in the present Imo State. Of these three, only Owerri Regional Water scheme was successfully realized and commissioned in 1986. Though the scheme, not only covered communities within 10 kilometre radius from the centre of Owerri urban, it also operated at reduced installed capacity from the original master plan (Okereke et al, 2000). To date, Imo State Water Board manages 5 major water schemes namely; Owerri Regional Water Scheme, Orlu Township/Eluama Water Scheme, Oguta/Mgbidi Water Scheme, Mbaise/Obowo Water Scheme and Okigwe Urban Water Scheme. Other agencies that have made efforts in the water supply and sanitation sector in the State are; the State Ministry of Public Utilities and Rural Development (MPURD), Imo State Water Development Agency (IWADA) and the United Nations Education Fund (UNICEF). Between 2000 and 2005, the State Ministry of Public Utilities and Rural Development sank 60 boreholes while the Imo State Development Agency and the United Nations Education Fund, respectively, sank 25 and 123 boreholes (Okereke, et al 2000; Okereke, 2000; Imo State Government, 2006). Further efforts in the State are the World Bank-Federal Government Water Rehabilitation Project launched in November 1992 (Okereke et al, 2000; Imo State Government, 2006) and the recent European Union-Assisted Micro Projects Programme (EU-MPP6) initiated in May 2003 (Federal Government of Nigeria-European Union, 2006; Imo State Government, 2006).

According to Tryon and Cookson (2000), project is the use of one or more resources (e.g. money, labour, material, and equipment) during a specified period for the purpose of producing some economic return or output at a later time. Chadenet and

King (2007) viewed project as an optimum set of investment-oriented actions by means of which a defined combination of human and material resources is expected to cause a determined amount of economic and social development. Project therefore, involves the use of resources (e.g. money, labour, material and equipment) during a specified period to develop a facility for the production of goods and services over a longer period of time. In any project undertaking, according to Valadez and Bamberger (2007), is an input-output-effect relationship. Inputs are resources (financial, human and material) necessary to perform project activities with the expectation of producing outputs (goods and services) and achieving the effects of the project. Outputs are specific goods and services which the project is expected to produce from its inputs to achieve the effects. Effects are the outcomes of the use of the output (goods or services) of the project or expressions of the results actually produced as a result of the project, which has been undertaken. Effects may be short-or long-term. Short-term effects usually begin to emerge during the implementation period of a project, while the long-term effects defined as the ultimate changes in the conditions of beneficiaries resulting from the project, emerge some years after project completion.

As observed by Okereke (2010), within three years of construction, most rural water projects faced one problem or the other resulting in less than 30 percent performance as against installed capacity, nearly all the water schemes from 10 years old were found to have collapsed, necessitating the construction of new ones. It is a well known fact that the planning of projects heavily rely on quantitative data which may not be available under certain circumstances. Furthermore, they depend on estimates and forecasts which are subject to human error. In addition, projects rely heavily on external advisers with little knowledge of the local environment under which projects will operate (Baldwin, 2009). Salmen (2006) also observed that local communities are rarely invited to play constructive roles in the project design. According to Ezeigbo (2005), Oyebande (2006), Onugba and Yaya (2008), Nwankwoala (2009), Okeke and Uzoh (2009), rural water and sanitation projects in Nigeria have proceeded inconsistently, suffered from poor co-ordination, poor maintenance culture, poor technical/institutional structure, multiple programmes, lack of data/information for planning, over bearing bureaucratic control by various supervising ministries, lack of professional inputs on projects, lack of community participation, inadequate funding, irregular disbursements of subventions, inappropriate infrastructures as well as lack of adequate quality monitoring and evaluation, lack of clear policy direction, lack of focus in terms of goals and objectives which results in the country's inability to achieve full coverage of the rural population with safe water and improved sanitation services. However, there is the recently planned and executed EU-MPP6 water supply and sanitation projects in Imo State, Nigeria for which there may be constraints and lessons learnt or even the revelation of success factors for planning, executing and sustaining similar projects in the future. Thus, this study seeks answers to the following questions:

- a) What constraints featured in the planning and execution of the EU-MPP6 water supply and sanitation projects in Imo State?

- 120 b) What lessons are learnt from planning and executing of the EU-MPP6
121 water supply and sanitation projects in Imo State?
- 122 c) What success factors are revealed for planning, executing and
123 sustaining similar projects in the future?

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125 **2. MATERIALS AND METHODS**

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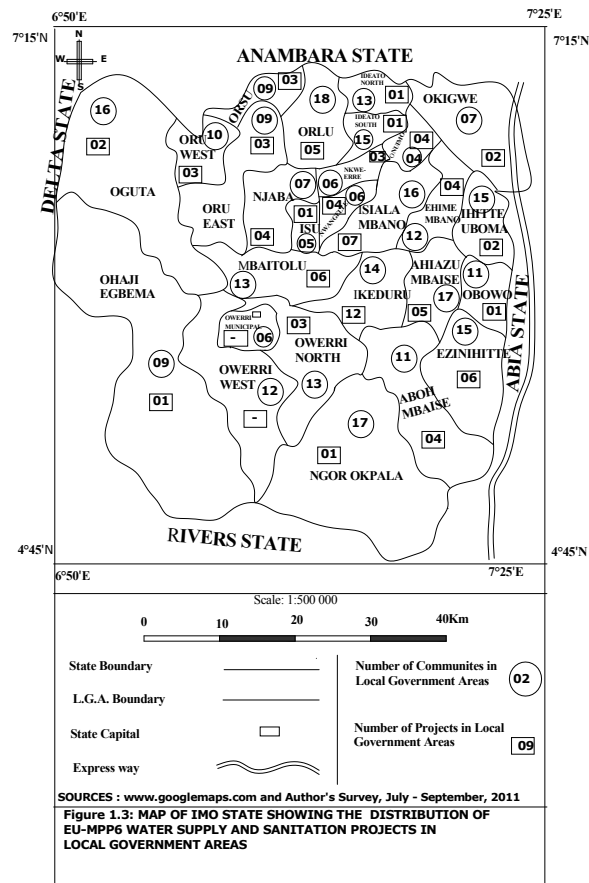
127 **2.1 The study area**

128 The study area is Imo State, Nigeria. It lies between latitude $4^{\circ} 45'N$ and $7^{\circ}15'$ North
129 and longitude $6^{\circ} 50'E$ and $7^{\circ} 25'$ E. It is bordered on the East by Abia State, on the
130 West by Delta State and River Niger, on the North by Anambra State, and on the
131 South by Rivers State. See Figures 1.1 and 1.2. The study area comprises an area
132 of 5,289.48 square kilometers. The hydromorphic soil occupies 3,845 square
133 kilometers (31 per cent) of the total land area while the alluvial soil occupies 1,066
134 square kilometers (8 per cent) of the total land area (Federal Ministry of Mines and
135 Power, 2001; NEST, 1991). It has a total population of 3,003,653 inhabitants
136 (National Population Census Figures, 2006). It contains 27 Local Government Areas
137 and 306 autonomous communities and has a population density of 568 people per
138 square kilometer.



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usually associated with the presence of temperature inversion at an altitude of 1,500 to 2000 meters, lasting for 2 to 3 weeks, and characterized by intermittent rainfall rather than the regular tropical downpour. The rainfall in this period is consequently lower than in June, July and September. Mean annual rainfall ranges from 2,000-2,500 millimetres/year, while the mean annual temperature over most of the study area is about 27⁰ C. The greater part of the study area is flat and low-lying. The main streams draining the state are Imo, Otamiri, Njaba and Urasi rivers. Four main geological regions can be distinguished in the study area. These are the Niger River Plain and Delta, the Coastal Plain, the Plateau Escarpment, and the Cross River Basin. In the study area there is a heavy reliance on both surface water and ground water. Between 2003 and 2008, a total of 88 EU-MPP6 water borehole projects were initiated and completed in the state as shown in Figure 1.3.



2.2 Data collection and data analysis

The survey method was employed in this study to select the target population and to get the desired responses on the EU-MPP6 water supply and sanitation projects. The research population included households where the EU-MPP6 water supply and sanitation projects were initiated and completed, members of staff of the EU-

164 MPP6 water supply and sanitation projects; and the EU-MPP6 project managers.
165 Data for the study were collected from the primary sources.

166
167 There are 301 communities in 27 Local Government Areas of Imo State. Between
168 2003 and 2008, a total of 88 EU-MPP6 water supply and sanitation projects were
169 executed in various communities across the 27 Local Government Areas of Imo
170 State (Federal Government of Nigeria-European Union, 2006). The study adopted a
171 multi-stage stratified random sampling approach in selecting subjects for the study.
172 The 27 Local Government Areas are taken as clusters. The 27 Local Government
173 Areas form the first sample frame from which 44 percent of the Local Government
174 Areas, representing 12 Local Government Areas of Imo State were randomly
175 selected. In each of the randomly selected 12 Local Government Areas,
176 communities where the EU-MPP6 water supply and sanitation projects were
177 initiated and completed were identified. The list of these communities formed the
178 second sample frame from which 50 percent of the communities, representing 29
179 communities were randomly selected.

180
181 The technique of the random sampling method employed is the fish-bowl technique
182 (Denga and Ali, 1998). The same procedure was employed in selecting the 50
183 percent of the communities. In terms of the selection of the respondents, the
184 randomly selected 29 communities served as the third sampling frame from which
185 stratified sampling method was employed to draw out 20 households from each of
186 the communities. Stratified sampling method was adopted to take care of the
187 heterogeneous and the amorphous nature of the population of study. In terms of
188 geographical spread, the study covered randomly selected 580 households from
189 randomly selected 29 communities which benefited from the EU-MPP6 water supply
190 and sanitation intervention in of Imo State.

191
192 Two sets of questionnaire were designed and utilized. The first set of questionnaire
193 was designed for households in the study communities. The second set was
194 designed for key staff of the European Union Micro Projects Program. The first set
195 of questionnaire contained question items relating to socio-economic characteristics
196 of the households. The questionnaire also contained question items relating to the
197 involvement of the communities in the planning and execution of the EU-MPP6
198 water supply and sanitation projects, constraints associated with the planning and
199 execution of the projects, lessons learnt in planning and executing the projects in
200 the communities, as well as the success factors attributed to the process of planning
201 and executing the projects. The second set of questionnaire contained question
202 items relating to project rules of the EU-MPP6 water supply and sanitation projects.
203 The study was conducted from 2005 to 2011. This period covered the gestation and
204 the manifestation period of the intervention (the project). Descriptive statistics such
205 as frequency distribution, percentages, category scores and rank scores were used
206 to analyze the data from the field survey.

207 208 **3. RESULTS AND DISCUSSION**

209 210 **3.1 Constraints in the Planning and Execution of the EU-MPP6 Water** 211 **Supply and Sanitation Projects**

212 The respondents were asked to indicate the constraints which featured in the
 213 planning and execution of the EU-MPP6 water supply and sanitation project in the
 214 communities. The constraints indicated by the respondents were inadequate
 215 community involvement, sourcing of funds, reliance on top-down approach to water
 216 project delivery, inadequate distribution of sufficient surface/ground water,
 217 inadequate consensus building, inappropriate cost recovery system, irregular
 218 functioning of installed facility, inadequate local built-up capacity, and lack of project
 219 maintenance structure. See Table 1. From the Table, 74.7 percent of the
 220 respondents rate inadequate community involvement as a high constraint, 16.6
 221 percent of the respondents rates it as an average constraint, while 8.8 percent of the
 222 respondents rate it as a low constraint. On inadequate funding as a constraint, 80.3
 223 percent of the respondents indicates high rating, 7.9 percent indicates average
 224 rating, while 11.7 percent of the respondents rates inadequate funding as a low
 225 constraint. Responses of respondents on high rating with respect to reliance on top-
 226 down approach to water project delivery account for 26 percent, responses of
 227 respondents on average rating account for 63.4 percent while 10.5 percent of the
 228 respondents indicates low rating for reliance on top-down approach to water project
 229 delivery. On the inadequate distribution of sufficient surface/ground water, 19.8
 230 percent of the respondents indicates high rating, 64.7 percent indicates average
 231 rating while 15.5 percent of the respondents rates inadequate distribution of
 232 sufficient surface/ground water as a low constraint. Responses of respondents on
 233 high rating with respect to inadequate consensus building account for 79 percent,
 234 responses of respondents on average rating accounted for 16.4 percent while 4.7
 235 percent of the respondents rates inadequate consensus building as a low constraint.
 236 On inappropriate cost recovery system, 43.6 percent of the respondents indicates
 237 high rating, 21 percent indicated average rating while 35.3 percent of the
 238 respondents indicates low rating constraint for inappropriate cost recovery system.
 239 Responses of respondents on high rating with respect to irregular functioning of
 240 installed facility accounts for 71.7 percent, responses of respondents on average
 241 rating of its effectiveness account for 14.5 percent, while 13.8 percent of the
 242 respondents indicates irregular functioning of installed facility as a low constraint.
 243 On inadequate local built-up capacity, 76.7 percent of the respondents indicated
 244 high rating, 16.6 percent indicates average rating, while 6.7 percent of the
 245 respondents indicates inadequate local built-up capacity as a low constraint.
 246 Responses of respondents on high rating with respect to lack of project
 247 maintenance structure account for 77.6 percent, responses of respondents on
 248 average rating account for 16.9 percent while, 5.5 percent of the respondents
 249 indicates lack of project maintenance structure as a low constraint. Generally,
 250 inadequate community involvement, sourcing of funds, and irregular functioning of
 251 installed facility, inadequate local built-up capacity, and lack of project maintenance
 252 structure greatly featured as low constraints in the planning and execution of the
 253 EU-MPP6 water supply and sanitation projects. This indicates the relevance of the
 254 factors in the planning and execution of the water supply and sanitation projects.

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TABLE 1: Constraints in the Planning and Execution of the EU-MPP6 Water Supply and Sanitation Projects

S/N	COMMUNITY	CONSTRAINTS																																																																																																											
		INADEQUATE												INADEQUATE												RELIANCE ON TOP-DOWN												INEQUITABLE												INADEQUATE												INAPPROPRIATE												IRREGULAR												INADEQUATE												LACK OF PROJECT											
		COMMUNITY												FUNDS												APPROACH TO WATER PROJECT												DISTRIBUTION												CONSENSUS												COST RECOVERY												FUNCTIONING OF												LOCAL BUILT-UP												MAINTENANCE											
		INVOLVEMENT																								DELIVERY												OF SUFFICIENT SURFACE/ GROUNDWATER												BUILDING												SYSTEM												INSTALLED												CAPACITY												STRUCTURE											
	VH	H	A	L	VL	VH	H	A	L	VL	VH	H	A	L	VL	VH	H	A	L	VL	VH	H	A	L	VL	VH	H	A	L	VL	VH	H	A	L	VL	VH	H	A	L	VL	VH	H	A	L	VL																																																																
1	EZUHU NGURU	3	12	5	0	0	4	12	2	2	0	2	5	11	1	1	1	2	14	2	1	4	15	1	0	0	2	2	12	3	1	2	11	4	3	0	2	13	3	1	1	13	1	3	2																																																																
2	OBOYUNU NGURU	3	12	4	1	0	3	14	1	1	1	3	2	13	1	1	3	3	12	1	1	9	5	4	1	1	1	2	14	3	0	1	13	3	2	1	2	13	3	2	0	12	3	4	1	0																																																															
3	INNAKRAMIA	3	13	2	1	1	4	12	2	1	1	3	3	12	0	2	1	1	14	3	1	12	2	5	1	0	2	14	1	3	0	0	14	3	2	1	2	13	3	1	1	14	2	4	0	0																																																															
4	UMULOLO OGBE	3	13	3	1	0	3	14	2	0	1	2	3	13	2	0	0	3	13	2	2	14	1	5	0	0	1	3	14	1	1	0	13	5	2	0	3	13	3	0	1	4	11	2	2	1																																																															
5	AMAEGBU	2	11	6	1	0	3	13	1	2	1	0	5	14	1	0	2	2	12	3	1	12	3	4	1	0	2	2	13	1	0	14	3	3	0	4	10	4	2	0	5	14	1	0	0																																																																
6	UMOKHOE EZUDO	2	13	4	0	1	3	12	3	2	0	1	2	15	1	1	2	1	14	2	1	14	2	4	0	0	1	1	3	14	1	1	13	2	4	0	5	11	3	1	0	4	14	2	0	0																																																															
7	EZIALA AMUMARA	2	11	3	2	2	4	13	1	1	1	1	2	12	2	3	0	2	14	3	1	13	1	3	2	1	2	3	2	13	0	0	14	2	3	1	2	13	3	1	1	5	14	1	0	0																																																															
8	AMAGHOR WITE	3	12	5	0	0	5	10	2	2	1	3	2	13	1	1	2	1	14	3	0	12	3	4	1	0	2	12	4	2	0	2	13	2	2	1	3	13	4	0	0	9	5	5	0	1																																																															
9	UMIJEZALA OBOBO	3	11	3	1	2	3	15	1	0	1	3	1	13	2	1	3	2	14	1	0	14	2	4	0	0	2	2	0	15	1	0	14	2	3	1	4	12	2	2	0	10	4	4	1	1																																																															
10	AMUWU	3	12	3	1	1	3	14	1	1	1	5	2	12	0	1	2	4	12	2	0	4	11	2	2	1	2	2	1	14	1	2	13	3	1	1	4	11	4	1	0	1	14	4	1	0																																																															
11	AGWU NA DIM	2	11	5	1	1	5	12	1	1	1	2	5	12	1	0	1	3	13	2	1	5	14	1	0	0	1	2	2	14	1	2	13	4	0	1	3	13	4	0	0	14	5	1	0	0																																																															
12	INKEATO UMOKHOE	3	12	2	1	2	13	4	1	1	1	1	4	13	1	1	1	3	12	3	1	4	14	2	0	0	2	2	2	14	0	2	14	3	1	0	3	13	3	0	1	12	2	5	1	0																																																															
13	UMUOHO EZHIE	2	11	5	1	1	3	11	2	2	2	2	3	13	1	1	0	5	13	2	0	5	14	1	0	0	2	2	13	1	2	13	3	1	1	3	12	4	1	0	6	10	3	0	1																																																																
14	AGADA ATTA	2	13	3	1	1	10	4	2	2	2	2	4	12	1	1	2	3	12	3	0	9	5	5	0	1	0	3	13	3	1	2	12	4	2	0	2	13	3	1	1	11	3	4	2	0																																																															
15	ABOH EBHORO	2	13	5	0	0	3	14	1	1	1	2	4	13	1	0	2	2	12	4	0	10	4	4	1	1	1	1	3	14	1	1	13	3	2	1	2	13	3	2	0	4	10	5	1	0																																																															
16	UMUOZHI	2	13	4	1	0	8	9	1	1	1	1	5	13	1	0	2	2	12	3	1	1	14	4	1	0	2	3	2	13	0	1	12	4	2	1	2	13	3	1	1	6	10	3	0	1																																																															
17	OWIBIRIBI	2	13	3	2	0	5	11	2	1	1	2	3	13	1	1	3	1	13	2	1	14	5	1	0	0	2	2	2	14	0	0	13	5	2	0	3	13	3	0	1	11	3	4	2	0																																																															
18	NDUKWU	2	14	3	1	0	2	14	1	1	2	2	3	13	1	1	0	2	14	3	1	12	2	5	1	0	2	3	13	1	1	2	12	3	3	0	4	10	4	2	0	4	10	5	1	0																																																															
19	UMUOCHOKE	2	13	3	1	1	2	12	2	2	2	1	5	13	0	1	2	1	14	3	0	6	10	3	0	1	2	4	12	1	1	0	14	2	3	1	3	13	4	0	0	14	5	1	0	0																																																															
20	UMUDURUKWE	2	12	4	1	1	5	12	2	0	1	2	2	14	1	1	3	3	12	1	1	11	3	4	2	0	5	11	2	1	1	2	14	1	3	0	4	12	2	2	0	13	3	3	1	0																																																															
21	AMAKUTA	5	11	2	1	1	5	10	2	1	2	3	3	12	1	1	1	3	13	2	1	4	10	5	1	0	2	13	3	1	1	3	12	3	1	1	4	11	4	1	0	12	1	5	1	1																																																															
22	NDIPA	2	13	3	1	1	13	2	3	0	2	2	4	12	2	0	2	3	13	1	1	14	5	1	0	0	3	13	2	1	1	1	13	3	2	1	3	13	4	0	0	10	4	4	1	1																																																															
23	UMUINWAFOR	3	13	2	1	1	4	12	1	1	2	5	2	12	0	1	1	1	14	3	1	13	3	3	1	0	4	13	1	1	1	2	13	3	1	1	3	13	3	0	1	1	14	4	1	0																																																															
24	UMUOCHAM NTU	4	13	1	1	1	4	12	2	1	1	1	4	12	0	3	2	4	12	1	1	12	1	5	1	0	1	3	13	2	1	1	1	14	1	3	1	3	12	4	0	1	14	5	1	0	0																																																														
25	AMAKHARA	3	13	2	1	1	5	12	1	1	1	2	2	13	1	2	2	2	13	2	1	4	15	1	0	0	13	4	1	1	1	1	0	14	2	3	1	2	13	3	2	0	12	2	5	1	0																																																														
26	UMUGARA	2	14	1	2	1	4	12	2	1	1	2	3	12	2	1	3	2	12	2	1	3	15	2	0	0	3	11	2	2	2	2	13	2	2	1	2	13	3	1	1	6	10	3	0	1																																																															
27	UMIASONYE	2	13	3	1	1	4	13	1	0	2	2	2	13	2	1	1	3	13	2	1	12	2	5	1	0	10	4	2	2	2	2	0	14	2	3	1	3	13	3	0	1	11	3	4	2	0																																																														
28	EZEKIRI	2	13	4	1	0	4	12	1	1	2	3	1	13	1	2	1	4	12	2	1	6	10	3	0	1	3	14	1	1	1	2	13	3	1	1	4	10	4	2	0	4	10	5	1	0																																																															
29	OBURE	3	11	3	2	1	5	10	2	2	1	3	2	12	1	2	0	2	13	2	3	11	3	4	2	0	3	12	2	2	1	2	13	4	0	1	5	11	3	1	0	6	10	3	0	1																																																															
	TOTAL	74	359	96	29	22	139	327	46	32	36	63	88	368	30	31	45	70	375	65	25	264	194	95	19	8	80	173	122	181	24	35	381	84	60	20	89	356	96	28	11	248	202	98	22	10																																																															
	% DISTRIBUTION	12.8	61.9%	16.6%	5.0%	3.8%	24.0%	56.4%	7.9%	5.5%	6.2%	10.9%	15.3%	63.4%	5.2%	5.3%	7.8%	12.1%	64.7%	11.2%	4.3%	45.5%	33.4%	16.4%	3.3%	1.4%	13.8%	29.8%	21.0%	31.2%	4.1%	6.0%	65.7%	14.5%	10.3%	3.4%	15.3%	61.4%	16.6%	4.8%	1.9%	42.8%	34.8%	3.8%	1.7%																																																																

VH=VERY HIGH=5; H=HIGH=4; A=AVERAGE=3; L=LOW=2; VL=VERY LOW=1

NUMBER OF SAMPLED HOUSEHOLDS=580

SOURCE OF DATA: AUTHOR'S FIELD WORK (JULY-SEPTEMBER 2011)

3.2 Lessons from the Planning and Execution of the EU-MPP6 Water Supply and Sanitation Projects

The respondents were asked to indicate the lessons learnt in the planning and execution of the EU-MPP6 water supply and sanitation project in the communities. The lessons indicated by the respondents were community involvement process, consensus building process, process of sharing costs and responsibility, project delivery process, knowledge of project outcomes/benefits, operation and maintenance of projects, sense of project ownership, process of building capacity, and new project identification. The distribution of the responses of respondents is

shown on Table 2. From the Table, 28.6 percent of the respondents indicate high rating for involvement process as a lesson learnt in the planning and execution of the EU-MPP6 projects, 60.3 percent of the respondents rates it as a lesson learnt on the average, while 11 percent of the respondents rates the lesson on the involvement process low. On consensus building process lesson, 29.7 percent of the respondents indicates high rating on it, 59.1 percent of the respondents indicates average rating on the lesson, while 11.2 percent of the respondents rates the lesson on consensus building process low. Responses of respondents on high rating with respect to lesson on process of sharing costs and responsibility account for 78.1 percent, responses of respondents on average rating for the lesson account for 15.5 percent, while 6.4 percent of the respondent rates the lesson on the process of sharing costs and responsibility low. 21.6 percent of the respondents indicate high rating for project delivery process as a lesson learnt in the planning and execution of the EU-MPP6 projects, 11.9 percent of the respondents rates it as a lesson learnt on the average, while 66.6 percent of the respondents rates the lesson on the project delivery process low. On the knowledge of project outcomes/benefits lesson, 51 percent of the respondents indicates high rating on it, 35.3% of the respondents indicates average rating on the lesson, while 13.6 percent of the respondents rates the lesson on knowledge of project outcomes/benefits low. Responses of respondents on high rating with respect to lesson on operation and maintenance of projects account for 35.2 percent, responses of respondents on average rating for the lesson account for 36 percent, while 28.8 percent of the respondent rate the lesson on operation and maintenance of projects low. 21.6 percent of the respondents indicate high rating for sense of project ownership as a lesson learnt in the planning and execution of the EU-MPP6 projects, 7.1 percent of the respondents rates it as a lesson learnt on the average, while 71.4 percent of the respondents rates the lesson on sense of project ownership low. On the process of building capacity lesson, 16.9 percent of the respondents indicates high rating on it, 33.6 percent of the respondents indicates average rating on the lesson, while 49.5 percent of the respondents rates the lesson on process of building capacity low. Responses of respondents on high rating with respect to lesson on new project identification account for 3.1 percent, responses of respondents on average rating for the lesson account for 14 percent, while 82.9 percent of the respondent rates the lesson on new project identification low. Generally, apart from lessons on involvement process and consensus building process which are rated average with response rates of 60.3 percent and 59.1 percent respectively, and the process of sharing cost and responsibility which attracted high response rate of 78.1 percent, other relevant lessons of project delivery process, sense of project ownership, and new project identification are rated low with response rates of 66.6 percent, 71.4 percent and 82.9 percent respectively. In other words the involvement of the communities in the planning and execution of the projects through consensus building and sharing of costs and responsibilities are activities connected to the achievement of the objectives of the EU-MPP6 projects.

Table 2: Lessons from the Planning and Execution of the Eu-Mpp6 Water Supply and Sanitation Projects

SN	COMMUNITY	EXPERIENCE VARIABLES																																																																													
		PROCESS OF COMMUNITY INVOLVEMENT										CONSENSUS BUILDING PROCESS										SHARING OF COST AND RESPONSIBILITY										PROJECT DELIVERY PROCESS								KNOWLEDGE OF PROJECT OUTCOMES/BENEFITS								OPERATION/MAINTENANCE OF PROJECTS								SENSE OF PROJECT OWNERSHIP								LOCAL CAPACITY BUILDING PROCESS								NEW PROJECT IDENTIFICATION							
		IN PROJECT PLANNING AND DESIGN										IN PROJECT IMPLEMENTATION										IN PROJECT MAINTENANCE										IN PROJECT EVALUATION								IN PROJECT OUTCOMES/BENEFITS								IN PROJECT OPERATION/MAINTENANCE								IN PROJECT OWNERSHIP								IN PROJECT LOCAL CAPACITY BUILDING								IN PROJECT NEW PROJECT IDENTIFICATION							
		YH	H	A	L	VL	YH	H	A	L	VL	YH	H	A	L	VL	YH	H	A	L	VL	YH	H	A	L	VL	YH	H	A	L	VL	YH	H	A	L	VL	YH	H	A	L	VL	YH	H	A	L	VL																																	
1	CHUMUWARI	10	7	1	1	1	4	1	13	1	1	14	5	1	0	0	3	2	4	10	1	2	9	7	2	0	2	4	9	4	1	2	2	0	12	4	0	2	7	6	5	0	0	3	3	14																																	
2	CHUMUWARI	5	2	11	1	1	4	2	12	1	1	12	2	5	1	0	4	0	2	13	1	5	0	6	0	1	4	5	7	4	0	0	1	4	13	2	1	5	6	3	5	0	0	2	2	16																																	
3	MANABARA	2	1	14	1	2	5	1	12	1	1	6	10	3	0	1	4	1	2	12	1	3	7	7	0	3	3	5	7	3	2	1	1	3	13	2	0	3	7	4	6	0	0	5	5	10																																	
4	MANABARA	2	1	14	1	2	4	2	12	1	1	10	3	4	2	1	2	2	4	11	1	2	6	9	1	2	4	7	6	3	0	1	2	2	11	4	2	2	9	3	4	0	0	3	3	14																																	
5	MANABARA	2	3	10	3	2	3	2	14	0	1	13	1	3	2	1	1	1	4	13	1	4	7	6	2	1	3	4	7	5	1	3	4	1	11	1	2	4	6	1	7	0	0	5	5	10																																	
6	MANABARA	1	5	13	0	1	3	1	13	2	1	12	3	4	1	0	2	2	3	13	0	3	6	0	2	1	4	3	5	7	1	2	2	1	13	2	1	3	8	4	4	0	2	2	4	12																																	
7	CHUMUWARI	2	2	14	1	1	3	3	12	2	0	14	2	4	0	0	1	2	4	12	1	1	9	0	1	1	2	9	5	3	1	1	2	1	13	3	0	1	8	4	7	0	1	2	4	13																																	
8	MANABARA	3	3	12	1	1	4	1	13	1	1	4	11	2	2	1	5	1	2	12	0	1	8	6	2	3	2	4	8	5	1	2	1	3	12	2	2	1	6	5	6	0	0	1	1	18																																	
9	MANABARA	2	4	12	2	0	5	2	10	2	1	5	14	1	0	0	4	2	3	11	0	3	8	7	1	1	1	5	8	5	1	1	2	1	13	3	0	3	4	6	7	0	0	3	5	12																																	
10	MANABARA	5	2	12	0	1	3	1	15	0	1	2	13	3	1	1	4	1	1	13	1	3	9	6	1	1	2	2	9	6	1	5	1	1	12	1	1	3	6	4	0	1	3	4	12																																		
11	MANABARA	3	4	10	0	3	3	1	14	1	1	3	13	2	1	1	1	2	3	14	0	2	6	9	2	1	2	3	6	0	1	3	2	1	11	3	1	2	9	6	2	0	1	2	5	12																																	
12	MANABARA	2	2	13	1	2	5	1	12	1	1	4	13	1	1	1	3	2	1	13	1	4	0	7	0	1	1	8	0	2	1	3	2	1	13	1	1	4	6	0	1	0	1	3	3	13																																	
13	MANABARA	2	3	12	2	1	13	1	4	1	1	3	13	2	1	1	3	1	1	14	1	3	10	6	1	0	2	4	7	6	1	4	1	0	14	1	1	3	6	9	1	0	1	2	5	12																																	
14	MANABARA	2	2	13	2	1	3	2	11	2	2	12	1	5	1	1	4	2	2	12	0	1	11	6	1	1	4	3	11	1	1	2	2	1	13	2	1	1	6	4	8	0	1	2	5	12																																	
15	MANABARA	1	2	15	1	1	10	2	4	2	2	6	13	1	0	0	2	3	3	11	1	2	7	9	1	1	1	8	6	4	1	1	3	1	13	2	0	2	8	9	1	0	1	3	3	13																																	
16	MANABARA	1	2	12	2	3	3	1	14	1	1	3	15	2	0	0	3	2	1	13	1	2	9	6	2	1	2	3	9	4	2	2	2	2	13	1	0	2	6	7	5	0	2	3	4	11																																	
17	MANABARA	3	2	13	1	1	8	1	9	1	1	12	2	5	1	0	2	3	1	14	0	2	7	0	2	1	4	8	3	4	1	3	3	1	12	1	1	2	8	5	4	0	1	2	5	12																																	
18	MANABARA	3	1	13	2	1	5	2	11	1	1	6	10	3	0	1	2	1	3	13	1	1	8	9	1	1	3	5	8	3	1	2	1	1	13	3	0	1	9	5	5	0	0	4	4	12																																	
19	MANABARA	5	2	12	0	1	2	1	14	1	2	11	3	4	2	0	1	2	2	13	2	2	7	6	2	3	4	2	7	3	4	3	2	3	10	2	2	2	6	4	6	0	1	3	3	13																																	
20	MANABARA	3	5	11	1	0	2	1	14	1	2	10	4	4	1	1	2	2	1	13	2	3	6	9	1	1	3	2	9	5	1	3	2	1	13	1	1	3	9	2	5	0	1	6	1	12																																	
21	MANABARA	1	4	13	1	1	2	2	12	2	2	12	2	5	1	0	3	1	2	12	2	3	6	4	1	6	2	6	6	0	4	2	1	11	2	1	3	6	4	6	0	0	3	5	12																																		
22	MANABARA	2	3	13	1	1	5	2	12	0	1	14	1	5	0	0	2	2	2	13	1	2	7	8	2	1	5	5	7	2	1	2	4	1	11	2	0	2	8	4	6	0	0	2	2	16																																	
23	MANABARA	2	4	12	1	1	5	2	10	1	2	12	3	4	1	0	4	3	2	10	1	5	6	7	1	1	2	3	9	5	1	1	3	1	13	2	1	5	7	5	4	0	1	1	3	15																																	
24	MANABARA	2	4	13	1	0	2	3	13	0	2	12	4	4	0	0	2	1	3	13	1	2	7	6	3	2	4	2	6	7	1	4	1	2	10	3	0	2	6	6	6	0	0	2	2	16																																	
25	MANABARA	1	5	13	1	0	3	2	13	1	1	13	1	3	2	1	1	3	2	11	3	2	7	6	3	2	3	3	6	0	0	3	3	2	10	2	2	2	6	4	0	0	3	2	15																																		
26	MANABARA	2	3	13	1	1	3	1	13	2	1	3	13	2	1	1	2	3	11	1	2	6	0	2	2	2	3	9	6	0	1	2	2	12	3	1	2	8	4	5	0	0	2	1	17																																		
27	MANABARA	3	3	12	1	1	5	2	12	0	1	12	1	5	1	1	2	1	3	13	1	1	12	6	0	1	3	5	5	6	1	3	1	1	12	3	1	1	6	6	6	0	1	2	1	16																																	
28	MANABARA	2	4	12	2	0	2	5	12	1	0	5	14	1	0	0	3	1	3	12	1	4	8	6	1	1	1	2	8	0	1	3	2	1	11	3	0	4	6	0	2	0	1	3	1	15																																	
29	MANABARA	5	2	12	0	1	4	1	13	0	2	3	15	2	0	0	3	1	2	13	1	4	7	7	1	1	2	4	8	5	1	2	2	1	13	2	1	4	2	5	8	0	1	4	1	14																																	
TOTAL		79	87	399	32	32	123	49	343	30	35	240	205	90	23	14	75	50	60	339	20	74	222	205	42	37	81	123	209	130	29	47	59	41	351	63	24	74	195	147	140	0	18	81	82	269																																	
PERCENTAGE		13.6%	15.0%	66.3%	5.5%	5.5%	21.2%	8.4%	59.1%	5.2%	6.0%	42.0%	35.3%	15.5%	4.0%	2.4%	12.3%	8.6%	11.9%	31.7%	4.0%	12.0%	38.3%	7.2%	6.4%	14.0%	21.2%	26.0%	23.8%	5.0%	11.6%	10.0%	7.1%	60.5%	10.9%	4.1%	12.8%	33.8%	25.3%	24.1%	10.0%	3.1%	14.0%	15.9%	16.1%																																		

WHILE MOST OF THE MANABARA AND CHUMUWARI COMMUNITIES HAVE

SOURCE OF DATA: AUTHORITY FROM MONTHLY JANUARY-SEPTEMBER 2010

NUMBER OF SAMPLED HOUSEHOLDS=50

NUMBER OF SAMPLED COMMUNITIES=50
SOURCE OF DATA: AUTHORS' FIELD WORK (JULY-SEPTEMBER 2011)

3.3 Success Factors in the Planning and Execution of the EU-MPP6 Water Supply and Sanitation Projects

The respondents were asked to indicate the success factors attributed to the planning and execution of the EU-MPP6 water supply and sanitation projects in the communities. The success factors indicated by the respondents were; inclusiveness of all socioeconomic groups, equitable sharing of costs and responsibility, guaranteed built-up capacity, stimulated timely delivery of project services, sustained achievement of project objectives, guaranteed equitable distribution of project benefits to all socioeconomic groups, delivery of sustainable water supply and sanitation project, promoted sense of project ownership, and stimulated new project identification. The distribution of the responses of respondents is shown on Table 3. From the Table, 30.3 percent of the respondents indicates high rating for inclusiveness of all socio-economic groups as a success factor in the process of planning and executing the EU-MPP6 water supply and sanitation projects in the sampled communities, 40.3 percent of the respondents rates it as an average success factor in the projects while 29.3 percent of the respondents rates the factor low. On equitable sharing of costs and responsibility, 76.6 percent of the respondents indicates high rating on it as a success factor in the process of planning and executing the EU-MPP6 projects, 15.9 percent of the respondents indicates average rating on the factor, while 7.6 percent of the respondents rates the

equitable sharing of cost and responsibility as a low success factor. Responses of respondents on high rating with respect to the guaranteed built-up capacity factor account for 19.3 percent, responses of respondents on average rating for the factor account for 33.6 percent, while 47.1 percent of the respondents rate the factor of guaranteed built-up capacity low. 36.9 percent of the respondents indicate high rating for stimulated timely delivery of project services as a success factor in the process of planning and executing the EU-MPP6 projects, 42.4 percent of the respondents rate it as an average success factor in the projects, while 20.7 percent of the respondents rate the factor low. On sustained achievement of project objectives, 31.9 percent of the respondents indicate high rating on it as a success factor in the process of planning and executing the EU-MPP6 projects, 46.2 percent of the respondents indicate average rating on the factor, while 21.9 percent of the respondents rate the sustained achievement of project objectives as a low success factor. Responses of respondents on high rating with respect to guaranteed equitable distribution of project benefits to all socio-economic groups factor account for 19.5 percent, responses of respondents on average rating for the factor account for 42.8 percent, while 37.8 percent of the respondents rate the factor of guaranteed equitable distribution of project benefits to all socio-economic groups low. 31.4 percent of the respondents indicate high rating for delivery of sustainable water supply and sanitation projects as a success factor in the process of planning and executing the EU-MPP6 projects, 39.7 percent of the respondents rate it as an average success factor in the projects, while 29 percent of the respondents rate the factor low. On promoted sense of project ownership, 3.6 percent of the respondents indicate high rating on it as a success factor in the process of planning and executing the EU-MPP6 projects, 11 percent of the respondents indicate average rating on the factor, while 85.3 percent of the respondents rated the promoted sense of project ownership as a low success factor. Responses of respondents on high rating with respect to stimulated new project identification factor account for 2.4 percent, responses of respondents on average rating for the factor account for 65.7 percent, while 31.9 percent of the respondents rate the factor of stimulated new project identification low. Generally, apart from the success factor of equitable sharing of cost and responsibility which records high response rates of 76.6 percent and the stimulated new project identification success factor which account for an average response rate of 65.7 percent, other essential factors such as inclusiveness of all socioeconomic groups, guaranteed built-up capacity, stimulated timely delivery of project services, sustained achievement of project objectives, guaranteed equitable distribution of project benefits to all socio-economic groups, delivery of sustainable water supply and sanitation project, and promoted sense of project ownership records response rates of slightly above 50 percent. This indicates that the sharing of costs and responsibilities is a strong success factor in the planning and execution of the projects. More so, because of the averagely built-capacity of the communities as a result of the projects, new ones emerged. In other words, the EU-MPP6 projects stimulated the communities in embarking on new projects.

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Table 3: Success Factors In Planning and Execution of the Eu-Mpp6 Water Supply and Sanitation Projects

		SUCCESS FACTOR																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											</
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4. CONCLUSION

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The constraints, lessons, and success factors provide the feedback on the effectiveness of the EU-MPP6 water projects. Before the intervention of the EU-MPP6 projects in Imo State, large numbers of communities have been without access to functional facilities which promote hygienic disposal of human waste. In addition, many communities witnessed incessant breakdown of water pumping

396 machines and maintenance of such facilities by the implementing agencies was
 397 rarely done. At the household level, women and children were the first to suffer
 398 when systems break down as they spent much time every day in search of water.
 399 The attendant socio-economic effects of this condition loomed over many
 400 communities, as water remained hardly adequate to meet the ever-increasing
 401 demand for sanitation.

402
 403 However, the situation in Imo State in the aftermath of the EU-MPP6 water supply
 404 and sanitation projects reveals improvements. This is because results of the study
 405 imply that the planning and execution of the EU-MPP6 water supply and sanitation
 406 projects was characterized by flexible community-involvement approach, built-up
 407 capacities of the communities, strong sense of community ownership of the projects,
 408 efficiency in operation, functioning and maintenance of the project facilities, and the
 409 integration of community-based organizations.

410
 411 On the other hand the success factors indicated in this study provide the basis for
 412 formulating strategies for improving similar water and sanitation projects in the
 413 future. The community-involvement strategy and the built-up capacities of the
 414 communities create opportunities in funding and provision of the water supply and
 415 sanitation services to keep pace with the rapid growth in communities. In addition,
 416 the utilization of community-based organizations by the project further improves and
 417 facilitates collective and individual efforts in delivering sustainable water supply and
 418 sanitation projects and improved services in communities.

419
 420 Based on the planning and execution of these EU-MPP6 water projects, the
 421 operation, functioning and maintenance of the installed EU-MPP6 water supply and
 422 sanitation facilities in the benefitting communities will not be at great risk overtime,
 423 because a practical, functional and holistic framework is imperative for an enduring
 424 and sustainable water and sanitation future for rural people.

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429 430 **COMPETING INTERESTS**

431 There are no competing interests.

432 433 434 **REFERENCES**

- 435
436 1 Baldwin, G. B. Non-governmental organizations and African development,
 437 Washington D.C: World Bank. 2009.
- 438
439 2 Chadnet B, King J.A. What is World Bank Project? Finance and Development.
 440 2007; (3): 2-13.
- 441 3 Denga K, Ali M. Case study research: Design and methods. Newbury Park,
 442 CA: Sage Publishing. 1988

- 443
- 444 4 Ezeigbo, H. Groundwater Quality Problems in Parts of Imo State, Nigeria.
- 445 Nigeria Journal of Mining Geology. 2005; (2): 1-9
- 446
- 447 5 Federal Government of Nigeria-European Union [FGN-EU]. Mid-term Review of
- 448 MPP6 Programme in Niger Delta. Final report. United Kingdom: HTSPE
- 449 Limited. 2006
- 450
- 451 6 Federal Republic of Nigeria. Water Policy. 1st ed. Abuja: Federal Ministry of
- 452 Agriculture and Natural Resources. 2000
- 453
- 454 7 Federal Ministry of Mines and Power. Geological Map of Nigeria 1:2,000,000
- 455 Scale. Abuja: Ministry of Mines and Power. 2001
- 456
- 457 8 Imo State Government [IMSG]. Statistical Year Book 2006. Owerri: Ministry of
- 458 Finance and Economic Development. 2006.
- 459
- 460 9 National Environmental Study Team (NEST). Nigeria's Threatened Environment:
- 461 A National Profile. Nigeria: NEST, Ibadan. 1991
- 462
- 463 10 Nwankwoala HO. Sustainable Groundwater Development and Management in
- 464 Nigeria: Mission Achievable or Mission Impossible? Water Research Journal.
- 465 2009; (19): 63-68.
- 466
- 467 11 Okeke OC, Uzoh OC. Towards Achieving Sustainable Water Resources
- 468 Management in Nigeria. Global Journal of Geological Sciences 2009; (1): 85–
- 469 92.
- 470 12 Okereke, PA, Udeagu EI, Eze UE. 2000. Water Supply Management in
- 471 Nigeria: Examples in some States. Nigeria: Cojee Publicatons. 2000.
- 472
- 473 13 Okereke, PA. The Water Problem in Old Imo State. Presented in Housing and
- 474 Environment. A Conference held at Imo State University, Owerri, Nigeria 2000.
- 475 16-19th September
- 476
- 477 14 Okereke PA. An Assessment of the Performance of Rural Water Supply
- 478 Schemes in Imo State. In: Igbozurike UM, Ijioma MA, Onyenechere EC,
- 479 editors. Rural water supply in Nigeria. 1st ed. Nigeria: Cape Publishers.
- 480 2010;(1): 37-44.
- 481
- 482 15 Onugba A, Yaya OO. Sustainable Groundwater Development in Nigeria. In:
- 483 Adelena, SMA, MacDonald AM. editors. Applied Groundwater Studies in
- 484 Africa. United Kingdom: Taylor and Francis. 2008; (13):502-510.
- 485
- 486 16 Oyebande L. Appropriate Administrative Structures in Harnessing Water
- 487 Resources for Sustainable Growth in Nigeria. Journal of Mining Geology 2006;
- 42(1): 21-30.
- 488
- 489 17 Salmen L. Beneficiary Assessment: An approach Described. Washington
- 490 D.C: World Bank. 2006

- 488 18 Tryon JL, Cookson FE. Project Planning in Developing Countries: A
489 Framework and Major Issues. Cambridge: Cambridge University Press. 2000
490
491 19 Valadez J, Bamberger M. Monitoring and Evaluating Social Programs in
492 Developing Countries: A Handbook for Policymakers, Managers, and
493 Researchers. Washington D. C: World Bank , Economic Development Institute.
494 2007.