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Climate Change and Food Security in Nigeria: The World Bank Assisted Third National Fadama Development Programme (Nfdp Iii) Approach in Rivers State, Niger Delta, Nigeria

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Abstract : Port Harcourt, Rivers State in the Niger Delta region of Nigeria is bedeviled by the phenomenon of climatechange, posing threat to food security and livelihood. This study examined a 4 decadel (1980-2020) trend of climate change as well as its socio-economic impact on food security in the region. Furthermore, to achieve sustainable food security and livelihood amidst the phenomenon, the study adopted the World Bank Assisted Third National Fadama Development Programme approach. The data source for climate change involved secondary data from Nigeria Meteorological Agency (NIMET). Consequently, the results for climate change over the 4decade period were displayed in tables, charts and maps for the expected changes. Data sources on socio-economic impact of food security and livelihood were acquired through questionnairedesign. A purposive random sampling technique was used in selecting 5 coastal communities inthe region known for viable economic potentials for agricultural development and the resultswere analyzed using Analysis of Variance (ANOVA). The Participatory Rural Appraisal (PRA) technique of the World Bank for needs assessment wasadopted in selecting 5 agricultural sub-project proposals/activities based on groups' commoneconomic interest from a total of 1,000 farmers each drawn from the 5 communities of differentage groups including men, women, youths and the vulnerable. Based on the farmers' sub-projectinterests, the various groups' Strength, Weakness, Opportunities and Threats (SWOT), Problem Listing Matrix, Skill Gap Analysis as well as EIAson their sub-project proposals/activities were analyzed with substantialMonitoring and Evaluation (M & E), using the Specific, Measurable, Attribute, Reliable and Time bound (SMART)approach. Based on the findings from the PRA technique, the farmers recorded considerableincreaseinincomeofover200%withinthe5yearprojectplan(2008-2013).Thestudyrecommends capacity building and advisory services on this PRA innovation. By so doing, there would be a sustainable increase in agricultural production and assured food security in an environmental friendly manner, in line with the United Nation's Sustainable Development Goals(SDGs).

Keywords : climate change, food security, fadama, world bank, agriculture, sdgs
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