**AN**

**ASSIGNMENT**

**ON THE TOPIC:**

**YOUTH FARMERS’ UTILIZATION OF IMPROVED RICE PRODUCTION PRACTICES IN AKWA IBOM STATE.**

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**CONCEPTS DEFINITION**

**Youth Farmers:** this refers to young individuals who are actively involved in agricultural activities such as cultivating crops, raising livestock.

**Utilization:** this involves the act of putting something into practice or use.

**Improved:** this is addition of value to an already existing way of doing something.

**Rice Production**: this is the processes involved in producing Rice. This processes could include; cultivation, weeding, fertilization, harvesting and storage.

**Rice Production Practices:** this refer to the techniques and methods used in growing, cultivating and harvesting rice. They aim at optimizing yields while ensuring the sustainability and efficiency of rice production.

**Rice production in Akwa Ibom State**

Rice is popular because it is rich in energy and has a protein content (7.5%) higher than that of any other cereal (IRRI, 1993). It is reported that the poorest third of urban households in West Africa obtain 33 percent of their cereal based calories from rice. The ease and rapidity with which rice can be prepared has made it a favourite urban dish. Therefore, very rapid urbanization has increased its demand, a condition which has led to producers deriving much profit from its sales. Rice is also one of the most important staple foods in Akwa Ibom State, Nigeria located in Southern Nigeria, has a significant agricultural sector, with rice farming playing a crucial role in its overall food production. Akwa Ibom State possesses fertile lands and a favorable climate for rice cultivation. The state's terrain comprises low-lying coastal plains and the Cross River basin, providing suitable conditions for rice farming. The tropical climate with high rainfall and temperatures ranging from 24°C to 30°C creates a conducive environment for rice cultivation.

Several varieties of rice are cultivated in Akwa Ibom State, including upland and lowland rice varieties. Commonly grown upland varieties include FARO 44, FARO 57, and FARO 61, while lowland varieties comprise FARO 52, FARO 56, and NERICA (New Rice for Africa) varieties. These varieties are selected based on their adaptability to the climate and soil conditions of the region. Depending on the rice variety, paddy fields are flooded either intermittently or continuously. Lowland rice farming usually relies on the continuous flooding method, while upland rice is grown in fields with intermittent irrigation. It is however disheartening to note that while rice consumption level is rising by 5 percent a year, there is an ever-widening gap between demand and local supply. The current sub-Saharan Africa cereal yields are the lowest of all regions of the world. Consequently, importation has become the order and as Singer (1997) reported; net cereal importation has risen from 3-9 million tones between 1970 and 1999. A substantial proportion of these imports is rice, as 6 million tones of rice is imported yearly into West Africa. In financial terms, Effiong (2002) quotes relevant sources to reveal that rice importation accounts for N60 billion, of the total sum of N250 billion expended yearly on food imports. It is pertinent to note that the present worsening economic climate in Nigeria, cannot sustain this expensive trend. To ameliorate the bleak trend reported above, intensive attempts to reinvigorate local rice production have been renewed. The focus this time around is on the hitherto neglected swamp rice production. SPORE (1998) revealed that only 15 percent of the 20-30 million hectares in-land (swamps) in West Africa are utilized and of these only 5 percent are devoted to rice production. Therefore, the state government has set mechanism to revitalize the flagging rice production industry. Encouraged by the attributes of rice as a potential foreign exchange earner, and taking cognizance of the low land nature and hence high potential for swamp rice production in Akwa Ibom State; in 1996 State government set up the Northern Akwa Ibom Swamp Resources Development Programme (NASRDP) in 1996. The programme was set up based on the reports of a feasibility study initiated in 1989. Recent findings however, indicate that the envisaged benefits from the rice development programme are yet to be realized, as lorry loads of rice are still being brought into the State from neigbouring States. Many problems are listed as constraining the programme, including: lack of funds, poor infrastructure (especially access routes), lack of adequate inputs, inadequate involvement and utilization of modern practices and inadequate number of extension agents.

**Improved Rice Production Practices**

Improved rice production practices refer to the adoption of advanced agricultural techniques, technologies, and management practices to enhance the productivity and sustainability of rice farming. These practices aim to optimize resources, increase yield, ensure food security, and minimize negative environmental impacts. Numerous research studies, publications, and experts in the field have highlighted various ways to improve rice production and these includes;

1. **Seed Selection and Quality Control:** Choosing high-quality seeds that are suitable for local conditions is crucial for improving rice production. The development and use of improved varieties, such as hybrid rice, can significantly increase yield potential. Proper seed treatment and storage techniques also help preserve seed quality.
2. **Integrated Nutrient Management:** Balanced nutrient management enhances soil fertility and promotes healthy plant growth. Through the judicious use of organic and inorganic fertilizers, composting, and efficient nutrient application methods, farmers can optimize nutrient availability and prevent nutrient imbalances, thereby achieving higher yields and minimizing nutrient losses.
3. **Water Management:** Efficient water management practices play a vital role in rice production. Techniques such as alternate wetting and drying (AWD), system of rice intensification (SRI), and precision irrigation can help conserve water, improve water-use efficiency, and reduce greenhouse gas emissions.
4. **Pest and Disease Management:** Effectively managing pests and diseases is crucial for achieving optimal rice yields. Integrated pest management (IPM) techniques, including the use of resistant varieties, biological control, cultural practices, and judicious pesticide application, help reduce yield losses and minimize environmental impacts.
5. **Post-Harvest Management:** Efficient post-harvest management practices are vital to reduce losses, maintain grain quality, and ensure food security. Techniques such as proper drying, storage, and value addition activities contribute to improved post-harvest handling.

**Youth farmers’ utilization of Improved Rice Production Practices in Akwa Ibom State**

Even though youths are being hindered and marginalized in agricultural programmes and projects, they remain an important force in agriculture in Nigeria. According to Ekong (1999), young farmer utilizes heavy well filled seeds for planting and are selected by soaking paddy in water which is mixed in a container and properly stirred with the hands. Good seeds will settle at the bottom while bad ones float, and are skimmed off. The better seeds are thereafter properly dried, preparatory to planting. It is believed that heavy seeds ensure vigorous plant growth and early development of deep and thick root systems, to aid water and nutrient absorption from deeper soil layers. All cultivated rice varieties are exotic or improved. The most popular of which are Suakoko 8 (Isim enang) and Mas 2401 (Bokime) which are cultivated by more than 60 percent respondents.

Akankpo (2002) reveals that 50 percent respondent utilized mulch to improve soil fertility, 25 percent, utilized compound fertilizers which was mixed with the soil during the final land preparation phase, just before seed is placed in the soil. 15 percent respondents however still relied on the age-long tradition of shifting cultivation.

(Akankpo, 2002) also reported that birds were declared by 68 percent respondents as the most serious pest of rice plants which attack rice at the very vulnerable milky stage. Other pests include Rodents (18%) and stemborers (12%). However, Bird scaring techniques include the stationing of young boys as early as 5.30am till 7.00pm at various points in the field to scare away the birds. No chemical pest control method was utilized by youth respondents.

Youth farmer were observed to start weeding operations on observation of heavy weed infestation and is heavily dependent on soil type and depth of water on the rice farm. Weeding is indispensable to good yield since rice which is weeded late never recovers but turns brownish (instead of green) with a consequent low yield. Hands (mainly) or knives (in some instances) are used for weeding as hoes may loosen the compacted soil around growing crops.

Radical approaches therefore become necessary in terms of utilization of hitherto abandoned wetlands for swamp rice production. Modern production methods would also have to be introduced to the rural farmer. Before this however, indigenous knowledge practices are still utilized by these young rice farmers and there is need to cover the lapses which could be improved upon in compatibility with farmer’s production conditions and environment.

**Challenges faced by Youth Rice Production in Akwa Ibom State**

In Akwa Ibom State, there are myriads of challenges facing youth rice producers in the adoption of production practices and a few includes;

* **Access to Information:** The availability and accessibility of information on improved rice farming techniques significantly affect adoption rates. Studies suggest that the use of extension services, farmer field schools, and information and communication technologies play a crucial role in disseminating knowledge and empowering youth farmers.
* **Financial Constraints:** Lack of financial resources and limited access to credit networks hinder youth farmers' ability to invest in improved practices such as high-quality seeds, fertilizers, and machinery. Government support, microfinance initiatives, and cooperative structures are potential solutions to alleviate these constraints.
* **Training and Education:** The level of training and education among youth farmers is positively correlated with the adoption of improved rice production practices. Strengthening vocational training programs, agricultural curricula, and skill development initiatives can enhance their knowledge and skills.
* **Infrastructural Limitations:** Inadequate rural infrastructure, including road networks, storage facilities, and irrigation systems, poses significant challenges to young farmers. Addressing these limitations through public investments and policy interventions would enable improved rice production practices.
* **Socio-cultural Factors:** Cultural preferences for traditional farming methods, gender disparities, and social norms influence the adoption of improved practices. Raising awareness, promoting gender equality, and engaging youth in decision-making processes can help overcome these socio-cultural barriers.

**Conclusion**

Conclusively, to increased youth participation and utilization of the improved Rice production practices, the Governments should develop and implement supportive policies that address the challenges faced by youth farmers. This includes providing financial incentives, improving access to credit, establishing agricultural extension services, and creating platforms for youth participation in policy formulation.

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