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Preliminary report

# Prison Farm Inmates' Reformation and Rehabilitation: the Nigerian Experience

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## Abstract

The main objective of this study was to assess farm management activities of prison farms in Nigeria. The study adopted a survey design. Most implemented programs in prison farms included crop production. Inmates preferred rice farming because it is a staple food with a readily available market to sell and make profit. There were no provisions made by the management of the prison farms visited to reach out to prisoners upon release. Agricultural activities that could increase inmates' chances of gainful employment when released and channel energy and thoughts towards positive things motivated them to effectively participate in farm operations. To enhance inmates' skills acquisition in agricultural vocations, more efforts should be made by the management of Nigerian prisons service to sustain fully implemented agricultural programs while attempts are made to fully implement other agricultural programs, especially in the areas of animal husbandry.

**Keywords:** prison farm, short-term prisoners, correctional staff, recidivism, agriculture, prison-based programs

## Introduction

Reformation and rehabilitation are the cornerstone and indeed dominant objectives in modern penal practice (Stephen et al., 2012). A change is possible for everyone. Even people in the prison can change for better and become good and productive citizens, but this requires some sacrifice from inmates themselves and substantial help from the government and relevant agencies (Stephen et al., 2012; Asokhia & Osumah, 2013). Convicted persons are often sentenced to prison terms for rehabilitation purposes. Rehabilitation services are notable for their pivotal role in changing the life of inmates. Unfortunately, these services do not exist or are utterly inadequate in most prisons, especially in the developing nations. In most cases, providers of rehabilitation services are either ill-equipped or not at all able to give wholesome services that can affect inmates' lives positively (Abba, 2016).

According to the Nigerian Prisons Service Manual (2011), one of the major objectives (reform and rehabilitation of convicts) of the prisons service is to be achieved through a complicated set of mechanisms. Among others, they include conscientization, group work, case work session, recreational activities, religious services and adult and remedial education programs, educational development project, skills acquisition program, mid-range industrial production, agricultural service and after-care service program. In other words, well-established prisons have the responsibility to keep in safe custody persons legally sentenced to jail and identify the causes of their inherent anti-social behavior and treat and reform them to be law-abiding citizens upon completion of their prison sentence. This is achieved by implementing a set of coordinated programs that are psychological, social, technical, vocational and economic in nature. Agricultural activities fall within technical/vocational and economic programs outlined to help prison inmates in Nigeria.

Technical and vocational training is particularly relevant in solving the present economic problems in Nigeria due to, *inter alia*, rather high unemployment rate (Alhasan & Abdulahi, 2013). Engaging inmates in agricultural activities will help them earn a living upon release from prison. Agricultural activities in Nigerian prisons cover those activities directly related to production or processing of crops, dairy products, poultry or livestock for initial commercial sale or as a principal means of personal subsistence. Also, they include cultivation or harvesting of trees and activities directly related to fish farms.

Inmates' engagement in one or several agricultural activities is crucial because some of them become incarcerated whilst more socially, economically and educationally disadvantaged (Asokhia & Osumah, 2013). Secondly, there is a need to ensure that inmates use the time they spend in confinement to improve their chances of becoming law-abiding, well-adjusted and responsible members of the society after serving their sentences.

In view of the increasing global emphasis on rehabilitation services and programs for prison inmates, this study focuses on assessing farm management activities in Nigerian prison farms. Thus, it explores certain types of agricultural activities available to prison inmates and ranks them based on inmates' preference, ascertains the extent to which agricultural programs have been implemented and ascertains factors motivating prison inmates to participate in such programs.

Hypothesis: there is no significant difference in the factors that motivate inmates to participate in the various agricultural programs available in Ozalla and IbiteOlo prison farms.

## **Materials and methods**

*Study area:* Zone G (Benin) managed by the Nigerian Prisons Service was used for this study. It covers prisons in Anambra, Edo, Delta, Ebonyi and Enugu States (NPS, 2016). Edo and Enugu States were suitable for the study because of the presence of prison farms, as opposed to the other states under the same jurisdiction that do not have prison farms.

*Population and sampling procedure:* The general population for the study came from the Enugu and Benin prisons represented by the officers and prison inmates. The Enugu State has four prisons, with the maximum security prison located in Enugu, the state capital. These include: Enugu Prison, Ibite Olo Farm, Nsukka Prison and Oji River Prison (NPS, 2016). Ibite Olo Farm was

intentionally selected for the study. The Edo State has a total of six prisons with the major prison in Benin, the state capital. The prisons are: Benin (Old), Benin (New), Ogba Farm, Ozalla Farm, Ubiaja and Auchi (NPS, 2016). The Ozalla Farm was selected on purpose because of its proximity.

The total number of inmates in Benin (Ozalla Farm Centre) at the time of study was 41 while Enugu (Ibite-Olo Farm Centre) had 13 of them. However, the management did not disclose the staff numbers. Hence, interaction was limited to the officers on duty on the day inmates were interviewed as the size of staff was termed classified for security reasons. Hence, 12 and seven prison officers participated in both states. This brought the total population for the study to 54 prison inmates and 19 officers.

*Design of study:* Survey design was used in the study. Survey research involved the collection of information from a sample of individuals through their responses to questions (Check & Schutt, 2012). This type of research allows for a variety of methods to recruit participants, collect data and utilize various methods of instrumentation (Ponto, 2015). Survey research can use quantitative research strategies (e.g. using questionnaires with numerically rated items), qualitative research strategies (e.g. using open-ended questions) or both strategies (i.e. mixed methods). Since they are often employed to describe and explore human behavior, surveys are therefore frequently used in social and psychological research (Singleton & Straits, 2009).

*Data collection:* A semi-structured interview schedule was used to elicit responses from inmates while questionnaires were used to obtain responses from the staff available within the period (July — November 2016) the study was carried out.

*Measurement of variables:* Inmates were asked to pick from the available options (pig farming, sheep rearing, goat rearing, oil palm production, cassava farming, maize farming, vegetables) the type of agricultural activities they were engaged in. In ranking the available agricultural activities based on inmates' preference, respondents were required to indicate the agricultural activity they preferred most and state the reason for their choice.

The extent to which agricultural activities have been implemented in the prison was determined by asking staff to indicate the type of agricultural activities available for inmates in their prison, namely: pig farming, sheep rearing, goat rearing, oil palm production, cassava farming, maize farming, vegetables. They were further required to indicate the extent of their implementation using a four-point Likert scale: to a great extent (4), to an extent (3), to a little extent (2) and to no extent (1). The values were added up to get 10 later divided by 4 to get 2.5 (mean). Variables with mean  $\geq 2.5$  were regarded as fully implemented agricultural activities while variables with mean values  $< 2.5$  meant quite the opposite. Further questions were raised regarding the duration of inmates' engagement in the selected agricultural activities, the actors who participated in the formulation/modification of the activities and reasons for their involvement among others.

Inmates responded to factors that motivated them to participate in agricultural activities, such as: the benefits that derived from the activities, suitability of activities to their inherent needs, the personnel who coordinated those activities. A four-point Likert scale of definitely will (4), probably will (3), probably will not (2) and definitely will not (1) was used to measure how these variables motivated inmates to participate. The values were summed up to get 10, which was divided by

4 to obtain a mean score of 2.5. Factors with mean  $\geq 2.5$  were regarded as factors motivating inmates to participate in agricultural activities while those with a mean  $< 2.5$  were regarded as non-motivating factors.

*Data analysis:* Percentage, mean statistics and standard deviation were used in the analysis and presentation of the data. Hypothesis for the study was analyzed using the t-test ( $p \leq 0.05$ ). The Statistical Package for Social Science (SPSS) software package version 20 was used for the analysis.

## Results and discussion

### Socio-Economic Characteristics of Respondents

*Socio-economic characteristics of prison staff:* All respondents were male (Table 1). This reflects a male-dominated workforce. A sizeable proportion (57.9%) of the respondents was within the 41 — 50 age bracket with a mean age of 46 years. This implies that the majority of the respondents was still within their middle, economically productive age and thus had the ability to synthesize and supply relevant information/instructions to inmates. The majority (89.5%) of the respondents were married. This implies that the selected prisons were populated with married employees which could help them focus better to achieve the prison’s objectives.

The Table 1 further reveals that less than half (42.1%) of the respondents had national diploma (ND)/higher national diploma (HND)/national certificate in education (NCE) as their highest level, while 31.6% had bachelor of science (B.Sc.) as their highest educational attainment. The implication of this finding is that, generally speaking, the respondents had relevant educational qualification to work in the prison. Furthermore, 52.7% of the respondents were agricultural science inclined. This implies that the prisons were populated with ‘farmers’ necessary for credible and efficient performance in prison farms.

**Table 1. Socio-economic characteristics of prison staff (N=19)**

Socio-economic characteristics	Percentage (%)	Mean (M)
<b>Sex</b>		
Male	100.0	
Female	—	
<b>Age (years)</b>		
31 — 40	21.1	46
41 — 50	57.9	
51 — 60	21.1	
<b>Marital status</b>		
Not married (single)	5.3	
Married (legally/traditionally)	89.5	
Widowed	5.3	
<b>Educational level</b>		
SSCE	5.3	
ND/HND/NCE	42.1	
B.Sc	31.6	
DVM	5.3	
M.Sc/Ph.D	15.8	
<b>Area of academic qualification</b>		
Agricultural	52.7	
Non-Agricultural	47.3	

<b>Length of service</b>		
<b>1 — 10 years</b>	42.1	19
<b>11 — 20 years</b>	10.5	
<b>21 — 30 years</b>	47.4	
<b>Administrative rank</b>		
<b>Assistant Comptroller of Prisons</b>	5.3	
<b>Chief Superintendent of Prisons</b>	5.3	
<b>Superintendent of Prisons</b>	10.5	
<b>Deputy Chief Inspector of Prisons</b>	26.3	
<b>Inspector of Prisons</b>	31.6	
<b>Assistant Inspector of Prisons</b>	10.5	
<b>Prison Assistant</b>	10.5	

About 47% of the respondents had worked between 21 and 30 years in the prison. The average years of service of respondents in the prisons amounted to approximately 19. This implies that respondents had worked long enough in the sector to observe through experience progress and decline in their prisons and therefore provide the necessary information required for this study. About 31.6% of the respondents were Inspectors of Prisons, 26.3% were Deputy Chief Inspectors of Prisons, while 5.3% were Assistant Comptrollers of Prisons. This implies that different levels of prison officers were duly represented, which means that the information provided gives a clear picture of the prison as most respondents were well-experienced in their various areas of study and departments.

*Inmates' socio-economic characteristics:* The Table 2 shows that 100.0% of the respondents were males with a mean age of 28 years and this was clear indication that the inmates were of productive age. The fact that they were of working age actually exposed them to crime commission or accusation of crime commission as the case may be. In addition, this result was not unexpected, especially in a society with mass unemployment and underemployment and in which poverty level has assumed alarming proportions. Most (74.1%) inmates indicated that they were not married. About 7% of the respondents indicated that they had no formal education, 29.6% attempted secondary education with only 22.2% completing it. The importance of education in shaping the lifestyle of youths cannot be overemphasized. Education is likely to help youths channel their positive energy and develop ambitions rather than engage in crime. Education has always been and always will be the most effective way to combat adversity. Rather than harshening laws to prevent people from making mistakes, we can encourage them to become productive members of society by providing them with education and training (Yousefi, 2016). In that respect, it is noteworthy to mention a study that focused on three and four-year-old children who were enrolled in an education program for 15 years. It found that children who didn't participate in the preschool program and who therefore missed out on some important opportunities for early childhood development were 70% more likely to be arrested for crime by the age of 18. This shows that early childhood

education and development is integral in ensuring the mental health and development of children and helping prevent crime at later ages (Yousefi, 2016).

**Table 2. Socio-economic characteristics of inmates (N=54)**

Socio-economic characteristics	Percentage (%)	Mean (M)
<b>Sex</b>		
Male	100.0	
Female	—	
<b>Age (years)</b>		
≤20	5.6	28
21 — 30	66.6	
31 — 40	27.8	
<b>Marital status</b>		
Not married (single)	74.1	
Married (legally/traditionally)	24.1	
Widowed	—	
Divorced	1.9	
<b>Educational level</b>		
No formal education	7.4	
Primary school attempted	5.6	
Primary school completed	24.1	
Secondary school attempted	29.6	
Secondary school completed	22.2	
Undergraduate	9.3	
Postgraduate	1.9	
<b>Number of children (under the age of 18)</b>		
No children	68.4	1
1 — 3	29.7	
4 — 6	1.9	
<b>Primary caretaker of children</b>		
Partner or ex-partner (e.g. wife, husband, girl- or boyfriend)	13.0	
Immediate family (e.g. mother, father, sister or brother)	13.0	
Extended family or in-laws	5.6	
Foster care or welfare	—	
Children look after themselves	—	
Don't know	—	
<b>Worked in farm before incarceration</b>		
Yes	55.6	
<b>Work skill possessed before incarceration</b>		
No work skill	9.3	
Building skill	18.5	
Handcraft skill	16.7	
Mechanical skill	14.9	
Farming skill	12.9	
Driving skill	9.3	
Welding skill	7.4	
Electrical skill	7.4	
Furniture skill	5.6	
Baking skill	1.9	
Plumbing skill	1.9	
Paint production	1.9	

Sixty-four percent on prison inmates indicated that they had no children under 18 years, 29.7% had one or three children whereas 1.9% had four or more children. A significant number (13.0%) of respondents' children under the age of 18 were being taken care of by a partner or ex-partner and immediate family. Only a small portion (5.6%) of the inmates' children were been taken care of by extended family. Families of inmates often suffer the consequences of the offender's absence from home (Bruyns, 2007). Maintaining a positive relationship with family members from prison is extremely difficult. Many inmates have hardly any visits from their family due to the distance

family members have to travel. Re-establishing family ties can heighten stress level of newly released inmates and provide yet another hurdle for them to negotiate after release (Bruyns, 2007).

Overall, 9.3% of the respondents said they had had no work skills before imprisonment. The majority indicated that they had obtained some form of skills such as building (18.5%), handcraft (16.7%), mechanical (14.9%), farming (12.9%) or driving (9.3%). This was encouraging since inmates could merge the newly acquired agricultural skills with the skills they had obtained before imprisonment to live a more comfortable life free from crime.

### Agricultural Activities Available to Inmates

Results in Table 3 show that eleven (11) agricultural activities were available for inmates to engage in. The activities ranged from cowpea farming, vegetable farming, oil palm production, cassava, and sheep rearing. Likewise, yam farming was available. The presence of these activities is an indication that the management of the prison farms had put in place avenues to effectively teach inmates practical agriculture in areas of crop production and animal husbandry. Agriculture is the foundation and bedrock upon which the development of stable human community has depended on throughout the whole universe, such as rural and urban communities (Onunze, 2012). Agriculture and its activities in Nigerian prisons have the potential to be the industrial and economic springboard from which inmates take off when their jail term is completed because of the multifunctional nature of agriculture. Agriculture is a key sector that has a positive impact on the majority of Nigerians (Okolo, 2004).

**Table 3. Agricultural activities in place for inmates**

Activities	Ibite-Olo prison farm N=7	Ozalla prison farm N=12	Total (%)
Cowpea farming	100.0	100.0	100.0
Vegetable farming	100.0	100.0	100.0
Oil palm production	100.0	100.0	100.0
Cassava	100.0	100.0	100.0
Sheep rearing	100.0	100.0	100.0
Maize farming	100.0	90.9	94.7
Rice farming	100.0	81.8	89.5
Pig farming	—	100.0	57.9
Goat rearing	—	100.0	57.9
Soybeans farming	—	90.9	52.6
Yam farming	—	27.3	15.8

\*Multiple response

*Inmates' preferred activity and reasons for preference:* As the Table 4 shows, rice farming was ranked as the most preferred agricultural activity by inmates accounting for 27.6%, followed by cassava farming (18.5%), pig farming (16.7%) and oil palm production (14.8%). Inmates preferred rice farming because it was staple food with a readily available market to sell and profit from it (18.1%), easy to plant and maintain (7.4%) and because they had knowledge about it (1.9%). Cassava farming was preferred due to the fact that it was easy to cultivate (13.0%), pig farming was considered very lucrative (13.0%), while inmates preferred oil palm production for the joy they derived in doing it (7.4%).

Inmates' high preference for rice production should be taken into consideration. Given the recent efforts by the Nigerian government to protect local rice industries, it is important to encourage inmates to increase their economic fortune by investing in rice production once released. Development of rice production in the country can contribute substantially to poverty alleviation, especially for resource constrained households and can increase household food security (Ajisola, et al., 2012). Encouraging the production of rice locally will lead to high reduction in dependence on imported rice. Interestingly enough, Nigeria is the world's second and Africa's largest importer of rice and over the years, the country has largely depended on imports to fill the local supply gap which arose due to inability of local producers to meet demand (Nkwazema, 2016). This presents a viable opportunity for the prison management to invest in rice production since revenue generation is one of its objectives. Cassava farming and by-products from its processing — *garri, fufu, tapioca* etc. are widely accepted in Nigeria. With a substantial number of inmates showing preference for its cultivation, it illustrates just how potential it is. Several investment opportunities lie in cassava production because its use cuts across both human and animal consumption. Inmates or the prison management can make a fortune from investment made in cassava.

**Table 4. Inmates' preferred activity and reasons for preference (n=54)**

Activities	Reason for preference	Percentage (%)	Total (%)
<b>Rice farming</b>	A staple food and readily available market to sell it and make profit	18.1	27.6
	Easy to plant and maintain	7.4	
	Very knowledgeable about it	1.9	
<b>Cassava</b>	Easy to cultivate	13.0	18.5
	I am more involved in it	3.7	
	Cultivated, processed and was into marketing it before imprisonment	1.9	
<b>Pig farming</b>	It is very lucrative	13.0	16.7
	Easy to setup and manage	3.7	
<b>Oil palm production</b>	Derive joy doing it	7.4	14.8
	It is very lucrative	5.6	
	It was the first task I handled in prison	1.9	
<b>Soybeans farming</b>	Easy to cultivate	7.4	7.4
<b>Goat rearing</b>	Less stressful	3.7	3.7
<b>Cowpea farming</b>	Easy to cultivate	3.7	3.7
<b>Vegetable farming</b>	Easy to cultivate and quick returns on investment	1.9	1.9
<b>Sheep rearing</b>	I am very used to it	1.9	1.9
<b>Maize farming</b>	Early maturing, easy to market and earn good financial returns	1.9	1.9
<b>Yam farming</b>	Derive joy in cultivating it	1.9	1.9

Pig farming business is a fast-growing enterprise in Nigeria. With a certain number of inmates expressing interest, it is necessary to guide them in all aspect of its production. Pig production has the capacity to supplement protein deficiency in Nigeria and likewise serve as a good source of revenue earnings for inmates when they engage in it. This view is corroborated by CAST (Council for Agricultural Science and Technology) (2001) which asserts that, beyond livestock's direct role in generating food and income, livestock are a valuable asset, serving as a store of wealth, collateral for loan and an essential safety net during times of crisis.



## Extent to Which Agricultural Activities Have Been Implemented

Oil palm production ( $3.79 \pm 0.54$ ), cassava farming ( $3.63 \pm 0.60$ ), sheep rearing ( $3.58 \pm 0.84$ ) and maize farming ( $3.32 \pm 0.95$ ) have been implemented in the prison farms under study to a great extent (Table 5). Nonetheless, soybeans ( $1.84 \pm 1.13$ ) and yam farming ( $1.21 \pm 0.63$ ) were least implemented in terms of crop production while goat rearing ( $2.42 \pm 1.35$ ) and pig farming ( $2.21 \pm 1.18$ ) when it came to animal husbandry.

Most implemented programs in the prison farms were those related to crop production. Efforts should be made by the prison management to fully implement agricultural activities in terms of animal husbandry. Knowledge gained by inmates in animal husbandry could possibly help them engage in diversified and sustainable agricultural production upon release. Furthermore, in addition to crop production and animal husbandry, there is a need to incorporate activities that will help inmates improve their literacy skills in the areas of reading and writing. According to Obioha (2011), if the existing trade and skills acquisition centers operate within prison yards, some of the inmates may prefer other trades and educational learning processes not covered by the prisons rehabilitation curriculum.

**Table 5. Extent to which agricultural activities have been implemented (n=19)**

Activities	Mean	SD
Oil palm production	3.79*	0.54
Cassava farming	3.63*	0.60
Sheep rearing	3.58*	0.84
Maize farming	3.32*	0.95
Vegetable farming	2.84*	0.77
Rice farming	2.79*	1.18
Cowpea farming	2.47	0.96
Goat rearing	2.42	1.35
Pig farming	2.21	1.18
Soybeans farming	1.84	1.13
Yam Farming	1.21	0.63

≥ 2.5 accepted

*Provisions for reaching out to ex-convicts:* The majority (68.4%) of staff indicated that there were no provisions to reach out to ex-convicts when released from prison as the Figure 1 illustrates. As shown in the Figure 2, this was due to the insufficient fund (36.8%) for the management of the prison farms to undertake this task and the fact that the majority of released inmates did not reside close to the prison farms when released (31.6%). There is a possibility that a large number of inmates will re-offend as soon as they are released and consequently go back to prison. About 50-90 percent of the prison inmate population in Nigeria includes youths and about a third of ex-prisoners re-offend (Yishau, 2014). The prison management must, out of necessity, put in place avenues to reach out to ex-convicts if they want to stop this trend or reduce it to a minimum. Post-release programs such as substance abuse, anger management and social skills can also be organized for inmates by the prisons and its partner agencies.

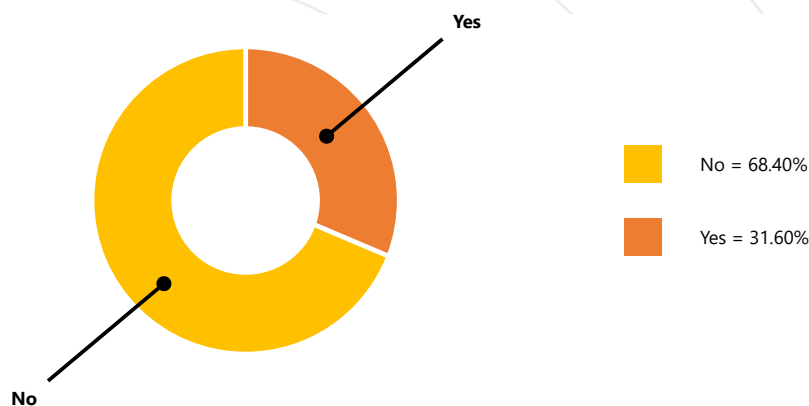


Figure 1. Provisions for reaching out to ex-convicts

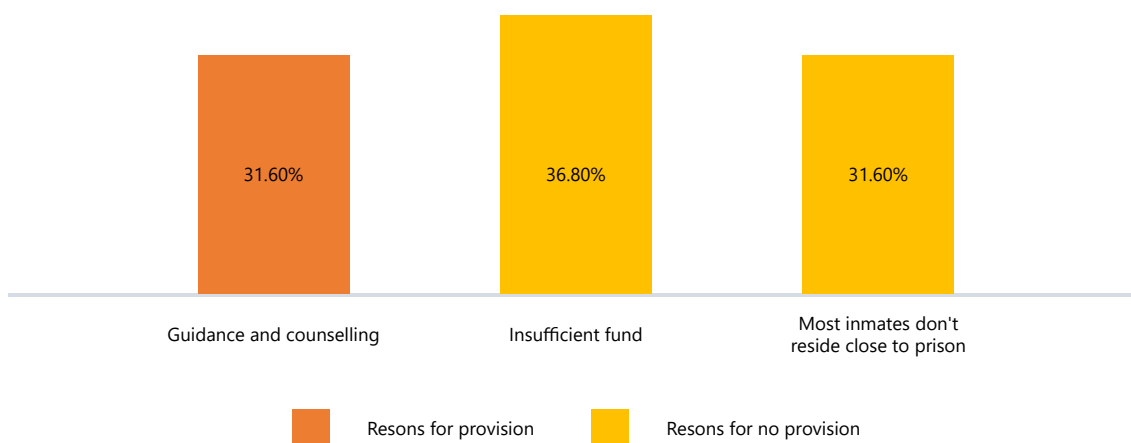


Figure 2. Reasons for/no provisions for reaching out to ex-convicts

*Provision for take-off grant to inmates upon release:* The Figure 3 shows that the majority (89.5%) of staff indicated that there were no provisions for a take-off grant for inmates on discharge from prison. As shown in the in Figure, this was due to the insufficient fund (78.9%), while 10.5% of staff reported there was no such plan for inmates by the management. The challenges stated are critical. Releasing inmates after years of incarceration without any form of financial assistance to take up agricultural vocations of their choice may increase their rate to re-offend. Regarding those that gave an affirmative answer (Figure 4), inmates accessed take-off grants by indicating interest and the prison management forwarded their applications to the national headquarters for consideration. This procedure is tied up in red tape. Several bottlenecks may easily occur in the process, leading to inmates not eventually getting any take-off grant to invest in any farming enterprise of their choice when released.

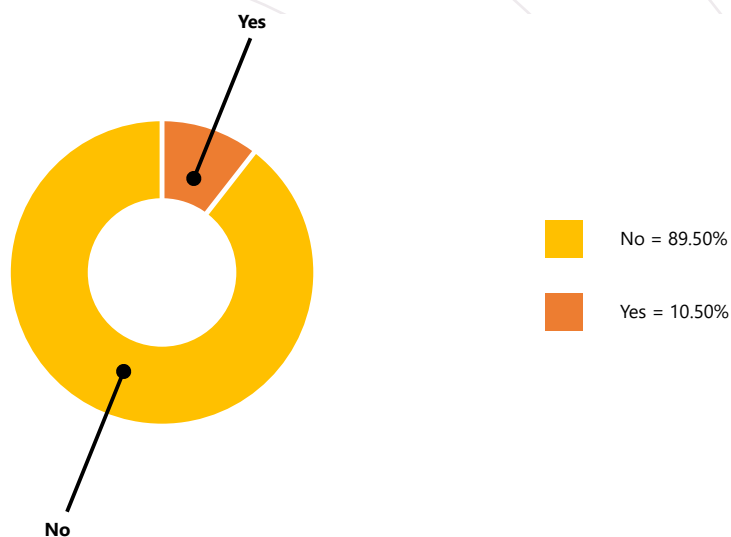


Figure 3. Provision for take-off grant to inmates

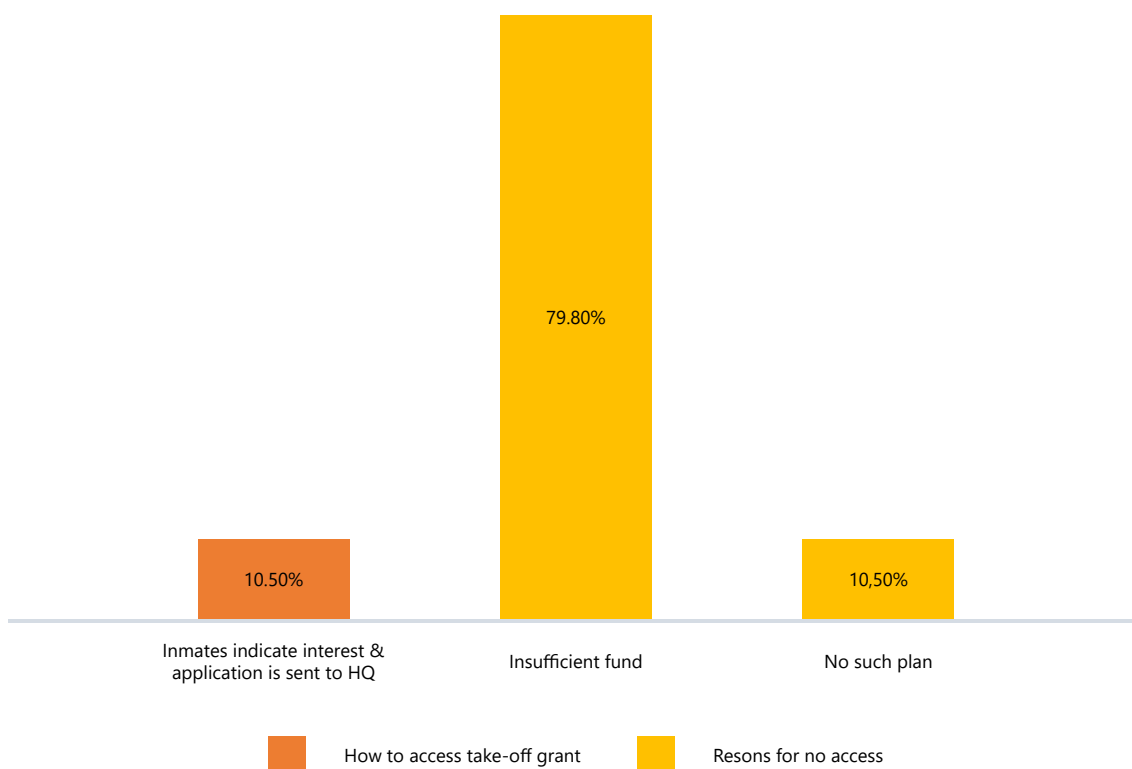


Figure 4. How to access/reasons for no access to take-off grant by inmates

*Knowledge passed to inmates and its sources:* The entries in the Table 6 show that knowledge passed onto inmates were in the areas of modern crop production (68.4%), application of herbicides (42.1%), farm hygiene and animal nutrition (21.1%). It is important to know the type of knowledge prison officers transfer to inmates within the agricultural activities. Modern crop production techniques will help inmates make a shift from some conventional local farming practices which are rather more energy consuming and less productive. Animals are susceptible to all forms

of diseases in dirty environment. Adequate farm hygiene and good nutrition are crucial for raising healthy livestock fit for consumption and healthy enough for marketing.

**Table 6. Knowledge passed to inmates by staff (n=19)**

Knowledge	(%)
Crop production techniques	68.4
Application of herbicides and fertilizers	42.1
Farm hygiene	21.1
Animal nutrition	21.1
Effective ways to market commodities	15.8
Sources of raw materials for compounding animal feed	10.5
Animal restraints	10.5
Palm oil processing	10.5

\*Multiple responses

*Sources of knowledge passed to inmates:* The Table 7 reveals that the sources of knowledge that the prison staff transferred to inmates included: inmates training and productivity department of the prisons headquarter (73.7%), training workshops (42.1%) and the internet (5.3%). Knowledge that came from less innovative sources could spell doom for inmates. Nigerian prison service inmates' training and productivity department is responsible for managing the prison farm centers. Hence, it was expected that the majority of staff attributed their source of knowledge to it. Some staff went a step further to consult literature to get adequate knowledge to help inmates learn the ideal methods. This was quite commendable. However, research institutes, federal ministry of agriculture and extension agents were less acknowledged as a source of knowledge-transfer. The same applied to the internet.

**Table 7. Sources of knowledge passed to inmates (n=19)**

Source of knowledge	(%)
Inmates' training and productivity department, prisons headquarters	73.7
Training workshops	42.1
Literature	26.3
Research institutes	15.8
Federal ministry of agriculture	10.5
Extension agents	10.5
Internet	5.3

\*Multiple responses

It is worthy to note at this point that the prison farms under study had no electricity supply. According to Manyong et al. (2005), poor infrastructure, including epileptic power supply, negatively affects the performance of enterprises in agriculture. Inadequate power supply makes it difficult to install ICT facilities that could help officers obtain the requisite knowledge from sources such as the internet. Information and Communication Technology (ICT) in agriculture has the potential to facilitate greater access to information that drives or supports knowledge sharing (Batchelor 2002; Chapman & Slaymaker 2002; Rao 2007; Heeks 2002; Glendenning & Ficarelli, 2012). Moreover, with adequate electricity supply, motorized processing machines can be installed in these farms to help fast track the processing of harvested palm fruits and cassava and improve storage of processed

animal products. This will have a multiplier effect in the overall knowledge and skills acquired by inmates and increase the revenue base of the prison farms.

### **Factors Motivating Prison Inmates to Participate in Agricultural Activities**

The study has shown that the activities that could increase inmates' chances of gainful employment when released ( $3.18 \pm 0.68$ ) and channel energy and thoughts towards positive things ( $3.15 \pm 0.72$ ) would definitely motivate them to take an active part in them. Involvement in formulating the activities was not likely to motivate inmates to participate in them ( $2.30 \pm 1.00$ ).

Employment is one of a range of factors that influence the likelihood of a prisoner re-offending. Indeed, in the context of community initiative, employment seems to be the single most important factor in preventing re-offending (Social Exclusion Unit (SEU), 2002). Given that job opportunities in Nigeria are highly competitive and require a certain level of skills and expertise to fit in, the situation points to a strong argument that vocational skills that center on agriculture should be a central part of the package of support to be offered to prisoners to support their transition to society after their prison sentence has been completed. Schuller (2009) identifies various studies and surveys that have shown that prisoners want to develop their vocational skills whilst in prison and that they prioritize this over other problems that they may face. He notes that prisoners often see problems relating to employment and a lack of skills as more important than health and family problems and seek help with these problems whilst in prison.

Inmates may be motivated to participate in agricultural activities for multiple reasons, including fun and enjoyment, desire to learn, improve skills and applicability (Fredericks et al., 2002; Ferrari et al., 2003). Inmates gain many developmental benefits from involvement in organized agricultural activities (Larson, 2000; Marczak et al., 2006). Such developments include: social skills (Bartko, 2005; Fredericks et al., 2002; Quinn, 1999), initiative and teamwork (Larson et al., 2005) and increased educational attainment and achievement (Mahoney et al., 2005; Bartko, 2005; Fletcher et al., 2000; Fredericks et al, 2002). Inmate engagement and participation can have a profound impact on almost every aspect of their development. This impact can significantly change the environments in which inmates live, work, and learn.

**Table 8. Factors that motivate inmates to participate in agricultural activities**

Motivational factors	Mean		t-value	Mean	SD
	Ibite-Olo prison farm N=13	Ozalla prison farm N=41			
Increase chances of gainful employment upon release	2.85	3.51	-3.38*	3.18	0.68
Help to channel energy and thoughts toward positive things	2.85	3.44	-2.75*	3.15	0.72
Competence and capability to handle the activities	3.00	3.29	-1.20	3.15	0.77
Very beneficial	3.00	3.20	-0.64	3.10	0.96
Learn what team work is about	3.00	3.17	-0.65	3.09	0.83
Promotion and development of leadership skills	2.92	3.17	-0.98	3.05	0.79
It is compulsory	3.08	3.02	0.17	3.05	0.99
Provides adequate training	2.92	3.12	-0.70	3.02	0.89
Personnel coordinating the activities	3.00	3.00	0.00	3.00	0.78
Marketing service helps to be more business minded	2.92	2.90	0.08	2.91	0.83

Planned based on felt needs	2.92	2.78	0.49	2.85	0.91
Very comprehensive	2.85	2.71	0.54	2.78	0.81
Engaged in the activities before imprisonment	2.85	2.44	1.21	2.65	1.06
Quality of farm inputs used	2.92	2.39	1.80	2.65	0.95
Satisfaction with equipment provided for the activities	2.92	2.32	1.91	2.62	1.02
Involvement in formulating the activities	2.31	2.29	0.08	2.30	1.00

≥ 2.5 accepted, \*significant at ≤ 0.05

This study found that the increased chances of gainful employment upon release and help in channeling energy and thoughts towards positive things were the factors marked by a statistical difference from zero at 5% level of significance in both prison farms. We thus reject the null hypothesis for these variables. However, there is insufficient statistical evidence to suggest that other variables (see Table 8) differ as such so we accept the null hypothesis for these variables which states that there is no significant difference in the factors that motivate inmates to participate in the various agricultural activities available in Ozalla and IbiteOlo prison farms.

## Conclusion

Prison inmates are encouraged to participate in rehabilitation programs while in prison because it affords them opportunities to acquire essential social skills, vocational training, attitudinal and behavioral changes and education about various aspects of life. Furthermore, rehabilitation programs will help inmates prepare for life outside the prison system. Thus, agricultural activities that center on animal husbandry and crop production were in place in the prison farms surveyed. Inmates were meaningfully guided to effectively participate in these activities and hence it can be said they had opportunity to learn one form of agricultural vocation or the other. To enhance inmates' skills acquisition in agricultural vocations, more efforts should be made by the management of the analyzed prison farms to sustain fully implemented agricultural programs while attempts are made to fully implement other agricultural programs, especially in the areas of animal husbandry, as well as create activities/avenues for inmates to learn how to read and write. To boost revenue generation and increase productivity in these prison farms, more innovative approach to animal husbandry and crop production should be considered by their management.

## References

- Abba, M. (2016). *Rehabilitation of prison inmates through vocational skills acquisition programs in north-west states, Nigeria* (PhD Thesis). University of Nigeria, Nsukka.
- Ajjola, S. Usman, J.M., Egbetokun, O.A., Akoun. J., Osalusi, C.S. (2012). Appraisal of rice production in Nigeria: A case study of north central states of Nigeria. *Journal of Stored Products and Postharvest Research*, 3(9), 133–136.
- Alhasan, N.U., Abdullahi T. (2013). Revitalizing technical and vocational education (TVET) for youth empowerment and sustainable development. *Journal of Educational and Social Research*, 3(4), 1-6.
- Asokhia, M.O., Osumah, O.A. (2013). Assessment of rehabilitation services in Nigerian prisons in Edo State. *American Journal of Contemporary Research*, 3(1), 1-7.

- Bartko, W.T. (2005). The ABCs of engagement in out-of-school-time programs. *New Directions for Youth Development*, 105, 109-120.
- Batchelor, S. (2002). *Using ICTs to generate development content*. IICD research report 10. The Hague: International Institute for Communication and Development.
- Bruyns, H.J. (2007). *The impact of prison reform on the inmate population of Swaziland* (Ph.D. Thesis). University of South Africa.
- Chapman, R., Slaymaker, T. (2002). *ICTs and rural development: review of the literature, current interventions, and opportunities for action*. ODI working paper 192. London: Overseas Development Institute.
- Check, J., Schutt, R.K. (2012). Survey research. In J. Check & R. K. Schutt (Eds.). *Research methods in education* (pp. 159–185). Thousand Oaks, CA: Sage Publications.
- Council for Agricultural Science and Technology (CAST), (2001). *Role of animal agriculture in the human food supply*. Ames, USA.
- Ferrari, T.M., Anderson-Butcher, D., Jesseson, K. (2003). *Hours of opportunity or hours of risk: What are early adolescents doing in their out-of-school time and why is it important to know?* Paper presented at the Extension Galaxy II Conference, Salt Lake City, UT.
- Fletcher, A.C., Elder, G.H., Mekos, D. (2000). Parental influences on adolescent involvement in community activities. *Journal of Research on Adolescence*, 10, 29-48.
- Fredricks, J.A., Alfeld-Liro, C.J., Hruda, L.Z., Eccles, J.S., Patrick, H., Ryan, A.M. (2002). A qualitative exploration of adolescents' commitment to athletics and the arts. *Journal of Adolescent Research*, 17(1), 68-97.
- Glendenning, C.J., Ficarelli, P.P. (2012). The relevance of content in ICT initiatives in Indian agriculture. International Food Policy Research Institute (IFPRI) Discussion Paper 01180, April, 2012.
- Heeks, R. (2002). Information systems and developing countries: Failure, success and local improvisations. *The Information Society*, 18, 101–112.
- Larson, R. (2000). Toward a psychology of positive youth development. *American Psychologist*, 55(1), 170-183.
- Larson, R., Hansen, D., Walker, K. (2005). Everybody's gotta give: Development of initiative and teamwork within a youth program. In J. L. Mahoney, R. W. Larson & J. S. Eccles (Eds.). *Organized activities as contexts of development: Extracurricular activities, after-school and community programs* (pp. 159-183). Mahwah, New Jersey: Lawrence Erlbaum Associates, Publishers.
- Mahoney, J.L., Larson, R.W., Eccles, J.S., Lord, H. (2005). Organized activities as developmental contexts for children and adolescents. In J. L. Mahoney, R. Larson & J. S. Eccles (Eds.). *Organized activities as contexts of development: Extracurricular activities, after-school and community programs* (pp. 3-22). Mahwah, New Jersey: Lawrence Erlbaum Associates, Publishers.
- Manyong, V.M., Ikpi, A., Olayemi, J.K., Yusuf, S.A., Omonona, B.T., Okoruwa, V., Idachaba, F.S. (2005). Agriculture in Nigeria: identifying opportunities for increased commercialization and investment. IITA, Ibadan, Nigeria. 159p.
- Marckaz, M.S., Dworkin, J. B., Skuza, J., Beyer, J. (2006). What's up? What young teens and parents want from youth programs. *New Directions for Youth Development*, 112, 45-56.
- Nigerian Prisons Service Manual (2011). Nigerian Prison Service, Abuja, Nigeria.

- Nigerian Prisons Service, (April 2016). About Nigerian prisons. Downloaded from: <http://www.prisons.gov.ng/> (29.04.2016.)
- Nkwazema, S. (2016). The rice debate: why Nigeria can't meet local rice production demand. *ThisDay*. Downloaded from: <https://www.thisdaylive.com/index.php/2016/11/05/the-rice-debate-why-nigeria-cant-meet-local-rice-production-demand/> (10.05.2018.)
- Obioha, E.E. (2011). Challenges and reforms in the Nigerian prisons system. *Journal of Social Science*, 27(2), 95-109.
- Onunze, M.T. (2012). *The impact of agricultural development on Nigeria economic growth* (B.Sc. Thesis). Caritas University Amorji Nike, Enugu State, Nigeria.
- Ponto, J. (2015). Understanding and Evaluating Survey Research. *Journal of the Advanced Practitioner in Oncology*, 6(2), 168-71.
- Quinn, J. (1999). Where need meets opportunity: Youth development programs for early teens. *The Future of Children*, 9(2), 96-116.
- Schuller, P.T. (2009). *Crime and lifelong learning*, National Institute for Adult and Continuing Learning (NIACE). Downloaded from: <http://www.niace.org.uk/lifelonglearninginquiry/docs/IFLL-Crime.pdf>
- Singleton, R.A., Straits, B.C. (2009). *Approaches to social research* (5th ed.). New York: Oxford University Press.
- Social Exclusion Unit (SEU) (2002). Reducing re-offending by ex-prisoners. Downloaded from: [http://www.gos.gov.uk/497296/docs/219643/431872/468960/SEU\\_Report.pdf](http://www.gos.gov.uk/497296/docs/219643/431872/468960/SEU_Report.pdf) (05.01.2015.)
- Stephen, J.A., Olaitan, O.L., Oyerinde, O.O. (2012). Assessment of sports activities in the reformation programs of prison inmates in South-Western Nigeria. *International Journal of West Africa University Game*, 1(1), 56-59.
- Yishau, O. (2014, October 27). Saving prisons from decay. *The Nation*. Downloaded from: <http://thenationonlineng.net/saving-prisons-from-decay/> (05.01.2015.)
- Yousefi, S. (2016, May 17). The long-term benefits of education as a crime-prevention measure. Novak Djokovic Foundation. Downloaded from: <https://novakdjokovicfoundation.org/long-term-benefits-education-crime-prevention-measure/> (10.05.2018.)



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## **Reformacija i rehabilitacija zatvorenika na zatvorskim poljoprivrednim radionicama: nigerijska priča**

### **Sažetak**

Glavni je cilj ovog istraživanja bio ocijeniti poljoprivredne aktivnosti koje se provode na zatvorskim poljoprivrednim radionicama u Nigeriji. Istraživanje je provedeno u obliku ankete. Najčešći programi koji su se izvodili na radionicama bili su oni koji se odnose na uzgoj usjeva. Najpopularniji oblik djelatnosti među zatvorenicima bio je uzgoj riže s obzirom da je riječ o osnovnoj živežnoj namirnici s razvijenim tržištem na kojem je moguće prodati taj proizvod i pri tome zaraditi. Uprava zatvora na kojima se provode analizirane radionice nije pratila uključene zatvorenike nakon njihovog puštanja na slobodu. Poljoprivredne djelatnosti koje po izlasku iz zatvora povećavaju izgleda zatvorenika za stabilno zaposlenje te usmjeravaju energiju i misli u pozitivnom smjeru motivirale su ih da aktivno sudjeluju u poljoprivrednom radu. Kako bi se unaprijedile vještine zatvorenika u poljoprivrednim djelatnostima, Uprava za zatvorski sustav u Nigeriji trebala bi intenzivnije podržati sveobuhvatne poljoprivredne programe, a u tijeku su pokušaji da se u potpunosti provedu i neki drugi poljoprivredni programi, posebice iz područja stočarstva.

**Ključne riječi:** poljoprivredna radionica, zatvorenici na izdržavanju kraće kazne zatvora, tretmansko osoblje, recidivizam, poljoprivreda, zatvorski programi