

NATIONAL COUNCIL FOR ADULT EDUCATION JOURNAL

Volume 25 Issue 2, June 2020



A publication of
NIGERIA NATIONAL COUNCIL FOR ADULT EDUCATION

Editor in Chief

Prof. Kolawole Kazeem Osun State College of Education, Ilesa

Editor

Prof. C. O Oladapo University of Lagos, Akoka - Lagos

Assistant Editor

Dr. Blessing Anyinkwa University of Lagos, Akoka - Lagos

Consulting Editors

Prof Dele Fajonyomi	University of Ilorin, Ilorin
Prof S. A. Oyebade	University of Lagos, Akoka-Lagos
Prof. A. B. Oduaran	North West University, Mmabatho, South Africa
Prof. Stella N. Nwizu	University of Nigeria, Nsukka
Prof. Idowu Biao	University of Botswana, Gaborone, Botswana
Prof. Gidado Tahir	University of Abuja, Abuja
Prof Abubakar Abba Haladu	National Mass Education Commission, Abuja
Prof Ben Ehezue	University of Port Harcourt, Port Harcourt.
Prof. S.A. Bello	University of Lagos, Akoka-Lagos.
Prof A. O. Obashoro-John	University of Lagos, Akoka-Lagos
Prof Keye Abiona	University of Ibadan, Ibadan
Prof Kehinde Kester	University of Ibadan, Ibadan
Prof. Yau Usman	Bayero University, Kano.
Dr. Bola Adedope	University of Ibadan, Ibadan
Dr. Chris Omoregie	University of Ibadan, Ibadan
Dr. Oye Oyelami	University of Lagos, Akoka – Lagos
Dr. Ronke Ojo	University of Lagos, Akoka – Lagos

Associate Editor

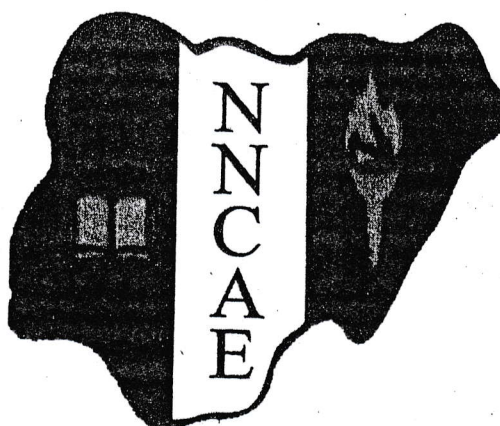
Dr. Adeola Afonja	University of Lagos, Akoka – Lagos
Dr. Perp Ememe	University of Lagos, Akoka – Lagos
Dr. Sheidu Sule	University of Lagos, Akoka – Lagos
Dr. Adeniyi	University of Lagos, Akoka - Lagos

ADULT EDUCATION IN NIGERIA

Volume 25, Issue 2, June 2020

Theme:

Adult Education and Information Communication Technology (ICT)



**JOURNAL OF NIGERIAN NATIONAL COUNCIL FOR
ADULT EDUCATION**

Published by NNCAE

✓
(c) Nigerian National Council for Adult Education 2020

All right reserved

ISSN: 2536-6696

CONTENTS

Editorial - Professor Cecilia O. Oladapo	vii
From the President NNCAE - Kayoom Kolawole Kazeem	viii
1. Re-Positioning Adult Education for Social Transformation and Good Governance in Nigeria <i>Ojokheta, K.O. PhD</i>	1
2. Learning the New and Un-Learning the Old: Towards Repositioning Adult Education for Social Transformation and Good Governance <i>Prof. Haruna Usman YA'U</i>	22
3. Facilitator Training and Enhancement of Quality Assurance in Adult Education in Udenu, Enugu State. <i>Michael O. Ugwueze, Maryrose N. Agboeze & Matthias U. Agboeze, (Ph.D)</i>	33
4. Enhancing Access to Adult Education Programmes: An Imperative for Good Governance in Nigeria <i>Eyam, Stella Ogar, Ph.d, Okon, Iquo M. Ph.D & Prof S.I. Akpama</i>	41
5. Assessment of Community Mobilization on Proper Disposal of Solid Wastes for Sustainable Community Development in Ilorin Metropolis <i>Olawuni, Abiodun Olufemi, Ph.D, Noibi, Tajudeen Oluwafemi & Iyanda, Abeebat Adekemi</i>	52
6. Public- Private Partnership as Model for Repositioning the Funding of Adult Education in Nigeria <i>Gilpin, Morgan & Prof. Oyebamiji, M.A.</i>	62
7. Repositioning Adult Literacy Programme Through Active Participation of Stakeholders for Social Transformation in Nigeria. <i>Dr. (Mrs.) AndongHelen A. & Adida, Francis Akonbende</i>	72
8. Repositioning Adult Education for Achieving Peace and Justice in Obio/Akpor Local Government Area, Rivers State. <i>Omeje Mercy Ebere & Dr. Adekola Ganiyu</i>	81
9. Quality Assurance Mechanisms for Improving Adult Education Programmes In Enugu State, Nigeria <i>Obetta, K. Chukwuemeka & Oyigbo, Dorida Nneka</i>	91
10. Repositioning the Misunderstanding of Adult Education for Social Transformation in Nigeria <i>Bell-Gam Roseline Soprinye & G. Adekola</i>	107

ASSESSMENT OF COMMUNITY MOBILIZATION ON PROPER DISPOSAL OF SOLID WASTES FOR SUSTAINABLE COMMUNITY DEVELOPMENT IN ILORIN METROPOLIS

OLAWUNI, Abiodun Olufemi, *Ph.D*
olawuniabbey@gmail.com or olawuni.ao@unilorin.edu.ng

NOIBI, Tajudeen Oluwafemi
tajunoibi@yahoo.co.uk or noibi.to@unilorin.edu.ng

&

IYANDA, Abeeab Adekemi
Department of Adult & Primary Education,
Faculty of Education,
University of Ilorin, Ilorin, Nigeria.
abeebatiyanda02@gmail.com

Abstract

The researcher assessed the community mobilization for proper disposal of solid wastes for sustainable community development in Ilorin metropolis of Kwara State, using a descriptive survey method. A questionnaire-based survey was done among the total of 100 adults and youths, but 73 questionnaires were used for the analyses, with 7.3% of the population. The population of the study comprised all host community people, adult learners and market women of 1,000. Four research questions were raised and one hypothesis. Data were collected with the use of validated instrument tagged Community Mobilization for Proper Waste Disposal (CMPWD). The content validity of the instrument was established using expert judgement and the test re-test reliability index of the instrument was 0.62. Data obtained were analyzed using t-test. The research findings indicated that the solid waste management system in those selected areas were poor. The community members have little or no proper orientation on how to manage and dispose their solid waste properly. The researcher recommended that there should be proper mobilization strategies of community people for orientation programmes in the communities, increased awareness on environmental sanitation, organization and provision of more and proper solid waste disposal mechanism in Ilorin Metropolis.
Key words: Community Mobilization, Disposal, Solid Wastes, Sustainable Community Development and Community Education

Introduction

Globally, tons of solid wastes are generated every day and waste management is drawing increasing attention, as it can easily be observed that too much garbage is lying uncollected in the streets, causing inconvenience, environmental pollution, and posing a public health risk (Owusu, Oteng-Ababio, Afutu-Kotey (2012). The problem of solid, liquid, and toxic-waste management in Africa has come with urbanization in the developing world. An important feature of the urbanization of the developing world is the rapid growth of cities and metropolitan areas. The high rate of urbanization in African countries implies a rapid accumulation of refuse. Social and economic changes that most African countries have witnessed since the 1960s have also contributed to an increase in the waste generated per capita. As a result, waste management constitutes one of the most crucial health and environmental issues facing community members. Proper waste management is a public benefit and obligation. Improper waste disposal by one individual can affect the entire community, so as a policy, countries have tasked every individual, establishment or institution to contribute significantly to the process of

keeping their communities and environment clean(Solid Waste Management, (2000) and Norley, (2009).

In the colonial days, the population of the communities was relatively lower than now, resulting to effective management of waste. The waste generated in the 1920s was less voluminous and less complex than today, consisting largely of leaves, paper and wood products, with little plastic or hazardous chemicals. The poor waste management situation in recent years has led to a high incidence of sanitation related illness, such as cholera, intestinal worms and typhoid, these are among the top ten diseases that have been recorded, which raises the alarm of a public health crisis (Snel,(1999) & Iyanda (2018). In Nigeria, problems are encountered at all levels of waste management, particularly, collection, transportation and disposal. Generally, existing public facilities, including sanitary facilities are inadequate to serve the users population, and the sheer volume of solid waste generated in the country's urban centers is overwhelming. As in many developing countries, waste management in Nigeria is a complex issue that has been a major issue on the priority list of successive governments, local authorities, and international donors in recent years. In 1960s, community people majorly dispose their wastes inside the bush and they also use to pass their wastes inside the bush. Later, there was the introduction of buckets and each house will pay for those that will come and upload the wastes. In 1970s, the introduction of pit toilet came up and each house was mandated to dig pit toilets in their house. The sanitary inspectors were monitoring the usage and any house that did not have pit toilet will be sanction and punish for it. Waste management is a growing problem in Nigeria and despite large investments that have been made to meet the challenges of effective waste management in urban and rural areas, there is little evidence that such efforts are having their expected effect. And government at federal, state and local levels were trying their best to make sure that the communities are tidy and neat always (Alli, Mashour, Cotton, Andrew and Westlake (2000); Boot, (2007). Waste disposals are all activities and actions required to manage waste from its inception to its final disposal. This include amongst other things collection, transport, treatment and disposal of waste together with monitoring and regulation. It also encompassing on recycling. It can take any form that is solid, liquid, gas and each have different methods of disposal and management. Waste management normally deals with all types of waste whether it was created in forms that are industrial, biological, household and special cases where it may pose a threat to human health. It is produced due to human activity such a when factories extract and process raw materials. Solid waste disposal refers to means of source separation, storage, collection, transportation and final emission of waste in an environmentally sustainable manner. In the light of this, proper disposal of solid waste is a very important environmental issue and an integral part of basic urban services. This can result in the loss of human resources needed in the development of the country. The collection, transfer and disposal of waste have generally assumed by the government in the world. These constitute a basic and expected government function. The formal varies in most urban areas where solid waste is collected either by government agency or private contractor. The management of waste become complex and the facilities provided cannot cope with the increasing demand and

needs. Therefore, best approach need to be implemented immediately while considering environmental, social and economic aspects (Iyanda, (2018). The drivers of sustainable waste management were clarified which include human, economic, institutional and environment aspect. Economic development and rising living standards in the African countries have led to increases in the quantity and complexity of generated waste, whilst industrial diversification and the provision of expanded health-care facilities have added substantial quantities of industrial hazardous waste and biomedical waste into the waste stream with potentially severe environmental and human health consequences which are indices for sustainable community development. Olawun, (2012). Nigeria's large population means that more people are living than targets is the impact of the lack of improved sanitation on Nigerian communities. Poor sanitation causes diarrhea, and the prevalence rate in Nigeria stands, at 18.8% (Cointreau,(2006). This contributes to high child mortality rates due to direct deaths from diarrhea (diarrhea is the second largest killer of children in the country, after malaria). Poor sanitation is also a major contributing factor to low education enrolment and achievement rates, malnutrition, lagging economic and social development, and poverty as a whole.

Community mobilization is a capacity building process through which community members, groups or organization plan, carryout and evaluates activities on a participatory and sustained basic to reduce or find solutions either on their own initiative or stimulated by others. It involves important processes like raising community awareness and building commitment, giving the citizens opportunity to explore their current beliefs, attitudes and practice, setting priorities, planning how best to meet their challenges, implement their plans and monitor their process and evaluation results. Community mobilization of a key population is seen as a means to reduce its vulnerabilities to issues and problem. It is a process where individual attitudes and beliefs, capabilities and crucial consciousness produce collective acorn resulting in positive transformation. The mobilization strategies that researcher adopted include: Development of Information network; Community Education; Popular Theatre; and Age grade (Olawuni, 2012).

Community mobilization for proper disposal of solid waste can be said to be suggestions made by individuals, stake holders, and health and sanitation agencies to the communities or societies on ways by which they could properly do away with their solid waste and also make the society and community members see the usefulness of solid waste through recycling. Information networking should be put in place among the community members on how they can mobilize each other for proper waste disposal in the communities. Community education must be promoted with right approaches for effective mobilization to educate community people the right way to do it. At local level, community people at the age grade level should mobilize themselves on better waste disposal in their communities. Through popular theatre, community people can be educated and mobilized on better ways they can dispose their wastes in their communities which will lead to sustainable community development. It has been observed that most Nigerians show a poor attitude towards solid waste disposal. Majority of these Nigerians have little or no knowledge of waste disposal management in the environment. More statistics has laid it bare that most Nigerians have the mentality that it is the responsibility of the government

to provide them with proper waste disposal management system (Solid Waste Management,2000). All these are what prompted the researcher to investigate ways of mobilizing the community people of the study areas on how to properly manage solid wastes in their communities.

The purpose of this research work is to:

- i). assess the types and components of waste generated in Ilorin metropolis.
- ii). examine means of waste disposal in the household within Ilorin metropolis.
- iii). examine how waste is being finally disposed of in research areas.
- iv). assess the capacity of the waste management instructions in managing solid waste.
- v). recommend some mobilization strategies that can be adopted by people in Ilorin metropolis for proper waste management.

Research Questions

1. What are the types and components of solid waste generated in Ilorin metropolis?
2. What are the various means by which solid waste is being disposed in the household within Ilorin metropolis?
3. How is solid waste generated disposed of in research areas?
4. What mobilization strategies that can be adopted by people in Ilorin metropolis for proper waste management?

Hypothesis:

The Mobilization Strategies adopted for proper waste management in Ilorin Mertropolis does not significant.

Research Methods

This research is based on community mobilization for proper disposal of solid waste in Ilorin metropolis of Kwara State. The research design adopted for this study is descriptive survey method.

Sample and sampling techniques

This research work was carried out in Ilorin metropolis of Kwara State. The sample of this research was taken from selected areas in Ilorin South, Ilorin West and As a Local Government Areas of Kwara State. The areas used were: Okeodo; Eyenkorin, Oja-Oba, Fate/Tanke and Tanke Iledu. In selecting sample, random sampling technique was employed. The total number of 100 adults was involved in the research with 20 people supposively randomly selected from each area. The selected sample was given the instruments (questionnaires) to fill and Focus Group Discussion (FGD) was conducted to complement the filling of questionnaires. Frequency counts and simple percentages distribution was used to analyze the presentation and interpretation of the data.

Demographic Representation of Participants**Table 1: Distribution of Participants by Age range**

Age	Frequency	Percent (%)
18-30 years	41	56.2
31-50 years	28	38.4
51 years and above	4	5.5
Total	73	100.0

As shown in Table 1, 41(56.2%) of the participants were between the ages of 18 to 30 years, 28(38.4%) ranged between 31 to 50 years while 4(5.5%) were aged 51 years and above. This shows that most of the participants were between the ages of 18 to 30, which were adults.

Table 2: Distribution of Participants by Sex

Sex	Frequency	Percent (%)
Male	35	47.9
Female	38	52.1
Total	73	100.0

As shown in Table 2, 35(47.9%) of the participants were males while 38(52.1%) were females. This shows that there are more females participated in the study.

Table 3: Distribution of Participants by Marital Status

Marital Status	Frequency	Percent (%)
Single	38	52.1
Married	31	42.5
Divorced	4	5.5
Total	73	100.0

As shown in Table 3, 38(52.1%) of the participants were single, 31(42.5%) were married while 4(5.5%) were divorced. This showed that there were more single participants in the study.

Table 4: Distribution of Participants by Number of Years in Communities

Number of Years of Residence in Community	Frequency	Percent(%)
Less than a year	4	5.5
1-2 years	19	26.0
3-5 years	25	34.2
6-10 years	18	24.7
11 years and above	7	9.6
Total	73	100.0

As shown in Table 4, 4(5.5%) of the participants have lived in the community for less than a year, 19(26%) for one to two years, 25(34.2%) for three to five years, 18(24.7%) for six to ten years and 7(9.6%) for eleven years and above. This showed that most of the participants have lived three to five years in the community.

Answering Research Questions

Research Questions One: What are the types of solid waste generated in Ilorin metropolis?

Table 5: Types of Solid Waste generated in Ilorin Metropolis

Types of Solid Waste	Yes Freq.(%)	No Freq.(%)	Total
Glass and Metals	63(86.3)	10(13.7)	73(100)
Hazardous Waste	58(79.5)	15(20.5)	73(100)
Combustibles	57(78.1)	16(21.9)	73(100)

As shown in Table 5, 63(86.3)% of the participants indicated that glass and metals were types of solid waste, 58(79.5)% were hazardous wastes and 57(78.1)% were combustibles. These showed glass and metals, hazardous waste and combustibles were types of solid waste generated in Ilorin metropolis.

Research Questions Two: What are the sources of solid waste in Ilorin metropolis?

Table 6: Sources of Solid Waste generated in Ilorin Metropolis

Sources of Solid Waste	Yes Freq.(%)	No Freq.(%)	Total
Medical Centers	49(67.1)	24(32.9)	73(100)
Slaughter Areas	67(90.4)	6(9.6)	73(100)

As shown in Table 6, 49(67.1)% and 67(90.4)% indicated that medical centers and slaughter areas are sources of solid waste in Ilorin metropolis.

Research Questions Three: What are the various means by which solid waste is being disposed in the household within Ilorin metropolis?

Table 7: Means of Solid Waste Disposal in Households within Ilorin Metropolis

Types of Solid Waste	Yes Freq.(%)	No Freq.(%)	Total
Water bodies	60(82.2)	13(17.8)	73(100)
Family pits	51(69.9)	22(30.1)	73(100)
Shallow pits	59(80.8)	14(19.2)	73(100)
Communal pits	61(83.6)	12(16.4)	73(100)
Land filling	66(90.5)	7(9.5)	73(100)

As shown in Table 6, 60(82.2)% agreed that water bodies were means of household's solid waste disposal, 51(69.9)%; family pits, 59(80.8)%; shallow pits, 61(83.6)%; communal pits and 66(90.5)%; land fillings in Ilorin metropolis. These shows that water bodies, family pits, shallow pits, communal pits and land filling were all means of household's solid waste disposal in Ilorin metropolis.

Research Questions Four: What mobilization strategies that can be adopted by people in Ilorin metropolis for proper waste management?

Table 8: Mobilization Strategies adopted for proper waste management in Ilorin Metropolis

Model	Understandardised Coefficient		Standardised Coefficient	T	Sig.
	B	Std. Error			
(Constant)	7.833	.646		12.120	.000
Popular theatre	-5.699E-02	.018	-.108	-3.192	.001
Age Grade	4.502E-02	.017	-.090	2.707	.007
Community Education	7.918E-02	.014	.157	5.553	.000
Development Information Network	.150	.018	.244	8.228	.000

The result from Table 8 shows the relative contribution of each mobilization strategies to dependent variables: popular theatre ($\beta = -.108$, $P < .05$), age grade ($\beta = -.090$, $P < .05$), community education ($\beta = .157$, $P < .05$) and development information network ($\beta = .244$,

$P < .05$). It is shown that all the independent variables (popular theatre, age, grade, community education and development information network) are significant.

Discussion of Findings

Glass and metals, hazardous waste and combustibles were types of solid waste that were been generated in Ilorin metropolis. Medical Centres and slaughter areas are also another sources of solid waste in Ilorin metropolis. The water bodies, family pits, shallow pits, communal pits and land filling were all means of household's solid waste disposal in Ilorin metropolis. In the study areas, land filling system is the most effective waste management strategies. Available data on the quantity and types of solid waste generated, and the methods employed in the treatment and disposal of generated waste, are incomplete, inconsistent and unreliable due to wide variations in data recording, definitions, collection methods and seasonal variations (World Bank 1999), while at a regional level, this mitigates against a clear view of the overall status and trends. At local level, lack of robust data acts as a barrier to the development and implementation of efficient and cost-effective waste management practices. This is line with (Solid Waste Management, (2000) & Cointreau, (2006) that opined that the management of waste become complex and the facilities provided cannot cope with the increasing demand and needs. And that the best approach needed to be implemented immediately while considering environmental, social and economic aspects. Despite the increasing urbanization and industrialization, the economic activity of the region remains predominantly agricultural and, as a consequence, generates substantial quantities of agricultural wastes. However, much of the waste is utilized within rural communities through composting, direct land application and some are used as construction materials. Most of the region's waste continues to be indiscriminately dumped on open land, land filling, controlled incineration and composting are increasingly being employed. Industrial solid waste generation rates vary from country to country and even within a country depending upon the nature of the active industries. Open dumping, land filling and incineration are the major disposal processes of industrial solid waste (Dahiya, (2003); Iyanda, (2018).

Generation of hazardous waste from manufacturing, hospital and health-care facilities and nuclear power and fuel-processing plants are rising and has been estimated to more than double within next 10 to 15 years. The community's capacity for adequately managing, the disposal of such wastes is extremely limited, particularly when additional wastes enter the region through the dumping activities of some industrialized nations (National Environment Policy, 2006). The poor waste management situation in recent years has led to a high incidence of sanitation related illness, such as cholera, intestinal worms and typhoid which are among the top ten diseases that have been recorded, which raises the alarm of a public health crisis (Norley, (2009; Iyanda (2018).

Conclusion

Over the decade, the region faces many waste management challenges that will require clear and effectively implemented policies and strategies. Efforts to develop inter-regional discussions on joint strategies and common approaches are continuing although individual communities will need to address specific issues associated with the current lack of long-term planning, proper policy formulation, insufficient government priority, insufficient finance, inadequate skilled personnel; non-challan attitude to public awareness and public participation, inadequate legislation and institutions and poor monitoring and enforcement. These have led to escalating environmental pollution and health problems in the community and, in the long term, may have implications for the continued economic development of the community (including various United Nations agencies, UNDP, UNEP, UNIDO, WHO, ESCAP, World Bank, ADB, and some donor countries) are offering both technical and final assistance for waste disposal in different societies (Zurbrugg, Drescher, Patel and Sharatchandra (2004); Franceys, Pickford and Reed(2000). There is however, a need to intensify efforts towards development of indigenous capabilities in the communities in terms of mobilization strategies through development of information networking, community education and so on to design, construction or installation, operation and maintenance on proper disposal of solid waste in Ilorin metropolis for sustainable community development.

Recommendation

Through the findings of the study, the following were recommended:

- * All leaders (community and political) and non- governmental officers should have imbibed the spirit of community education to their community people to assist them reflecting orderliness and sanitation in the communities.
- * There should be thorough development of information networking to increase awareness on environmental sanitation in the communities.
- * Proper solid waste disposal and management should be provided and organized in the communities, from the-grass root to the national level.
- * Government agencies should organize adequate orientation programmes as well as seminars and workshops through popular theatre and age grades, in order to enlighten the entire populace on proper waste disposal in Kwara State and its environments.

References

- Alli, Mashour, Cotton, Andrew and Westlake, K (2000): Solid waste disposal for low income countries.
- Boot, Niall (2007): Practical Action Technical Brief: Pit emptying systems, Practical Action.
- Cointreau S.(2006):Sustainable Solid Waste Systems in Developing Countries.TheWordlBank{siteresources.worldbank.org/INTUSWM/Resources/English_e-Sessions. pdf}.

- Dahiya, B (2003): *Hard Struggle and Soft Gains: Environmental Management, Civil Society and Governance in Pammal, South India*". Environment & Urbanization, Vol. 15, No. 1.
- Franceys, R., Pickford, J. and Reed, R. (2000): A Guide to the development of onsite sanitation. World Health Organisation.
- Iyanda A.A (2018): Community Mobilization for Proper Disposal of Solid Waste in Kwara State: An Implication of Environmental Education. Unpublished Project.
- National Environment Policy (2006): Ministry of Environment and Forests, Federal Government of Nigeria.
- Norley N (2009): Poor disposal of liquid waste a Menace for city dwellers. The Ghanaian: Chronicle
- Olawuni, A.O (2012): Mobilization Strategies and Project Partnership as Predictors of Sustainable Self-Help Projects in Southwestern Nigeria. (Unpublished PhD Thesis
- Owusu G, Oteng-Ababio M, Afutu-Kotey R.L (2012: Conflicts and Governance of landfills in developing country city, Urban Plan
- Snel, M. (1999): Social Stigma and the Waste Collection Scheme. Paper presented at the 25th Water, Engineering and Development Centre (WEDC) Conference on Integrated Development for Water Supply and Sanitation in Addis Ababa, pp. 350-353.●
- Solid Waste Management Manual (2000): Central Public Health and Environmental Engineering Organisation (CPHEEO).
- Zurbrügg, C, Drescher, S, Patel, A, & Sharatchandra H.C. (2004): "Decentralised Composting of Urban Waste: An Overview of Community and Private Initiatives.