

PROJECT PROPOSAL

“Feasibility of COMPOST TVET Education in Ethiopia”

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Acronyms and Abbreviations

AEEG	Association of Ethiopians Educated in Germany
ATPS	Africa Technology Policy studies
EPA.....	Environmental Protection Authority
FMESEDA.....	Federal Micro and Small enterprises Development Agency
Gdnet.....	Global Development Network
GIZ.....	German International Development Cooperation
SWM	Solid Waste Management
MOUDC.....	Ministry of Urban Development and Construction
MSE	Micro and Small Enterprises
NGOs	Non-Governmental Organizations
TVET.....	Technical Vocational Education and Trainings
WEDP.....	Women Entrepreneurship Development Project

ABSTRACT

It has been now in consensus a well-designed project is a cutting edge of smooth implementation of development cooperation programs. In view of this consideration, the research proposal has aimed in view of action-oriented research focused on pros and cons attached to engage women entrepreneurship development stakeholders efforts in 'Urban Agriculture' and 'Organic Solid Waste Management with MSEs' embedded in TVET strategies in Ethiopia.

The project will attempt to identify and assess efforts to establish documentation of the challenges and opportunities to undertake the women livelihood groups centered TVET Education in view of harness environmental health hazards, unemployment, food insecurity, rapid urbanization and related calamities, and working women migration focused on ensuring sustainable socio economic development efforts in the Country if tailor made 'Organic Solid Waste Composting and Management' and 'Urban Compost Agriculture' skills are provided.

The impetus behind the project work stems from the social and environmental policy planning dominated by fragmented efforts to draw on a framework of strengthened institutional capacity in technology transfer to ensure appropriate TVET provisions to MSEs and entrench jobs towards the realization of smooth implementation of the Country wide development strategies, mitigate environmental degradation, unemployment, working women migration, food insecurity, rapid urbanization and related calamities as well.

The capacity in Ethiopia in integrated urban development cooperation program with the applicable knowledge transfer in this project looks into the participatory planning and implementation among stakeholders at the Federal micro and small enterprises development Agency, the Addis Ababa City Administration, and other line Offices of GOs, NGOs, Public and Private Agencies engaged with sustainable, and harmonized efforts with the solid waste management, and urban agriculture sub sectors.

In Ethiopia, the WEDP has devised an approach to ensure that environmental and social safeguards are implemented. Not apart from this, findings from this research project will support assessments, and interventions to harness the escalating unemployment food insecurity and environmental health hazard risks under a network of the Federal Micro and Small Enterprises Development Agency at the Ministry of Urban Development and Construction and other stakeholders.

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I. Introduction

Planning of urban areas and their impacts on the environment became important issues of consideration. However, the urbanization experiences and policy changes faced by policy makers of various groups in the developing world vary substantially.

In Africa, although urbanization is a rather recent phenomenon, there is a prospect of Africans urban population doubling over the next few decades. As a result, the urbanization affects various challenges, and opportunities in the new region.

With the continued urbanization, the numbers of urban poor are depicted in the rise and poverty related to them will be increasing urban phenomenon. Urban policy can be defined with different facets, income poverty- urban poor lives on less than a dollar per day, urban hunger and the rate of malnutrition is emerging largely so in these developing Countries. Apparently, the issue of food security is more serious among urban poor than the rural.

Development and dissemination of economically efficient techniques of harnessing new and improved technology to bridge the ever-increasing gap between livelihood skills demand and food security in the developing urban centers is a formidable challenge for Governments, NGOs, and other private public stakeholders.

Although it is true that there are significant efforts to promote technological expertise and economic efficiency to mitigate these challenges, the prevailing social structures often serve to hamper the use of new models of innovation that enhances resource efficiency, resource productivity in urban environmental planning in developing and countries in transition including Ethiopia.

Cognizant of how these spread from their source to potential receivers and understand the factors affecting the adoption of SWM, and Urban Agriculture and related technology, this project has attempted to contribute to stakeholders' efforts from the most current research knowledge and assessment.

The approach has stemmed from lessons learnt and way forward with the social policy planning in the context of urban environment planning that address rapid urbanization, the climate change, economic efficiency and technological expertise in Ethiopia.

In Ethiopia, most development partners consider composting focused on environmental aspect of organic waste management, but could not envisage that next to use as fertilizers, and also organic waste serve as a source of natural gas to produce energy.

Lessons learnt from the AEEGs pilot composting Project in Kolfe Keranyo Sub city in Addis Ababa unfold low economic profitability of the compost plant as an unfortunate experience to replicate the pilot project.

In Europe and US there are successful companies that collect organic waste from hotels and restaurants and sell it to gas production facilities. This is big business there. Some will be also used to produce industrial animal feed or fertilizer. Usually projects are successful when they offer adequate compensation and profits.

To this effect, the study will attempt to identify, assess, and examine urban agriculture micro and small enterprises access to regular compost TVET Education.

2. Objectives

2.1 General Objective

The general objective of this review is to uncover prevalent conditions of institutionalized solid waste management, and urban agriculture micro and small enterprises access to regular compost TVET Education

2.2 Specific objectives

1. Enable a network of TVET actors to identify sustainable solution to women migrant workers, the SWM and rising food prices in Eastern African settings learning from selected urban areas in Ethiopia
2. Provide research information of urban development and environmental support efforts focused micro and small enterprises access to regular compost TVET Education

4.1 The role of SWM and Urban Agriculture MSE and TVET towards SWM provisions in Urban Ethiopia

Different people and organizations define food security differently. But the definition given below is the most widely accepted on which this research project adapts (E.Clay, 2012)

“Access of all people at all times to enough food for an active, healthy life”. “

In practical terms, the definition involves the following key components through which a household or community would attain this security.

- 1 Producing it themselves (increasing availability)
- 2 Purchasing it (having access)
- 3 Using and safeguarding the food available in a sanitary and efficient manner (increasing utilization)
- 4 Assets are created can be liquidated in time of stress.

On the other hand, food insecurity is, inferred from the above (ibid) and many other facts is defined as

““Food security [is] a situation that exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life”

To avert the prevalent food security challenges in Addis Ababa, systematic approaches of implement Solid Waste Composting and management, and Urban Compost agriculture TVET education and MSEs efforts enclose the composting technology

A well-organized efforts of the FMSEDA to establish sustainable “Urban Environmental planning” project will be worth note taking to show case excellence in “Urban Agriculture” and “Solid Waste ”

TVET Education with clear understanding of the social aspects of the ‘ Compost Technology’ (Rodgers ,1995).

The rationale behind is the development in the integrated approaches affect a type of change at social system level through improved social organization, improved per capita income, and improved production methods (Rodgers , & Shoemaker ,1971) .

It is noted the micro and small enterprises would affect obvert change in separation of organic /solid waste at household levels/, these present opportunities of interpersonal channels those involve face to face exchange of interaction between two or more individuals. Those channels have great effectiveness in the face of resistance or apathy on the part of the communicatee. What can these interpersonal can do to this effect?

1. Allow a two-way exchange of ideas. The receiver may secure clarification or additional information about the technology from the source to individual. The characteristics of interpersonal channels sometimes allow him to overcome the social and psychological barrier.
2. Persuade receiving individuals to form a change in strongly held attitudes (Rodgers & Shoemaker, 1971)

4.2 Opportunities of well-designed SWM & Urban Agriculture MSEs & TVETs in Addis Ababa, Ethiopia *(Implications to sustainable resource use and ecosystem management, and improved agricultural value chain management)*

Estimations concerning the waste generation in Addis Ababa range from 75 to 115 kg /inhabitant and year depending on area- and 60 to 65 % of the Municipality solid waste is estimated to be organic waste (Tessema, 2010).

The municipality spends large proportion of its budget on collection, transport, and disposal of solid waste. Solid waste collection services divided in to two sub-systems: primary and secondary collection. Primary collection is done by micro and small enterprises Residents are divided in Zones. One Zone constitutes 800-1000 residents. In each zone one MSE is assigned to work. The city is divided in to 549 zones each zone comprising 800-1000households.The number of enterprises organized to work on solid waste collection is 520 with a total number of 5815 operators. Most residents are willing to cooperate with the government in financing SWM (Ibid).

Insufficient funds as well as lack of promotion on-waste reduction: recycling, absence of cost recovery, practice of energy option, waste, separation and composting are among the financial challenge.

- Social problems encountered include: lack of public awareness, illegal dumping, poor condition of waste workers, lack of private sector and community involvement. Incompetence of organizations in terms of equipment required for operation and man power /staff qualifications, training and human resource developments/ and unreliable service are the institutional challenge that the city encountered in the sector (Regassa,, D.Sundaraa ,Seboka2011).

Some recommendations include

- Develop SME’S into viable companies.

- Capacity building in business Management.
- Improve push-cart to power driven technology
- Introduce easy to handle waste containers
- Develop SMSE's Awareness and Accountability
- Enable SME'S own waste collection & transport vehicles (Tessema,2010)

One of the challenges of rapid urbanization is how to make sufficient food available in a sustainable basis for the increasing population. Once the food is consumed or processed in the city, related market, and house hold waste contributes to urban pollution as large amounts of nutrients are simply waste (Lintzner in Techniques of Environmental Protection for sustainable Development; opportunity for the cooperation between Ethiopia and Germany January 16 17, 2009; Workshop proceedings Association of Ethiopians Educated in Germany Ghion Hotels Addis Ababa Ethiopia)

On the one hand the bio degradable fraction represents a resource when used as animal feed or fertilizer. On the other hand, in the course of ongoing urbanization and changing living conditions, organic waste has lost its link to the traditional reuse practices employed in agriculture Composting of the organic fraction of waste and the subsequent application of compost in Peri urban agriculture was therefore considered to be a solution in the course of development cooperation (ibid).

In view of this consideration, the study examined findings from 'Impact assessment of Addis Ababa City Administration micro and small enterprises agency during 2004/05 to 2009/2010 focused on solutions with lasting impact on the improvement of solid waste management, and can make new value chains a reality (Fitsum T. in AAMSEA, 2010).

4. Proposed Technical Implementation

A pilot project would find the vision and the determination to support t new business sector with the possibility of being a profitable venture with job creation potential, expansion of investment opportunities in the Country and above all a big environmental profit in addition to the above-mentioned aspects.

The project will also attempt to identify entry points to promote potential women migrant workers working on locally disposable resources and fractions of solid waste pass their livelihoods, generate income to share with their family members, and valued for what they confer in their communities.

In view of this consideration, the study will undertake the assessment in close consultation with the respective EPA Offices in Addis Ababa, Bahir Dar, Harar and Jimma towns.

The EPA in these Cities have outlined proposed compost sites .Henceforth, the research project will attempt to identify and assess efforts to establish documentation of the challenges and opportunities to undertake the women livelihood groups centered TVET Education in view of harness environmental health hazards, unemployment, food insecurity, rapid urbanization and

related calamities, and working women migration focused on ensuring sustainable socio economic development efforts in urban Addis Ababa, Bahir Dar, Jimma and Harar.

Expected outcomes from this research study will include

- Pilot Training package in project areas
- Number of residents in the pilot project area
- The rationale to select the sites
- Problems needed to be addressed on site

5. Time framework

Se. No	Activities/Duration	January 2021	February 2021	March
2012				
1	Consultation of Stakeholders			
2.	Finalization of Methodology			
3	Launch Baseline Survey, documentary research, and assessment)			
4.	FGD of Network of Macro/Messo/Micro level Research and Development efforts at the EPA, and stakeholders			
5.	Documentation of Best practices, and 'Modules'			

In Progress

Pending

6. Financial Proposal (Cost break down)

S/N	Activity	Quantity	Items	Duration Days	Unit Cost	Total Cost
1.	Experts fee					
	Lead Expert Fee	1	persons	45	3,000	135,000.00
	Regional Coordinators Fee	4	persons	25	2,000	200,000.00

	Assistant to Coordinators	4	persons	20	1,000	80,000.00
	Sub total					235,000.00
3.	Data analysis					
	Data encoders	4	persons	9	250	9,000.00
	Sub total					9,000.00
4.	Publication					
	500 colorful copy	500	pages		60	30,000.00
	500 VCD	500	pieces		50	25,000.00
						55,000.00
	Total					299,990.00
	Contingency 10%	-				29,999.00
Grand total						328,999.00

The total Budget will be 328, 999.00 Ethiopian Birr. Taking the Exchange Rate at the National Bank of Ethiopia 1 kroner will be to 32.27 Ethiopian Birr, the research work proposes a for the Completion 99,999.70 kroner.

