

RESEARCH REPORT

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**Horticulture Project for People with Mental Disorders
or Epilepsy: Successes and Challenges.**

ANNUAL PROGRAMME RESEARCH REPORT

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LIST OF ACRONYMS

AIC	Agricultural Institute of Canada
BN	BasicNeeds
CPN	Community Psychiatric Nurse
FGD	Focus Group Discussion
GEPC	Ghana Export Promotion Council
NGOs	Non-Governmental Organisations
PDA	Participatory Data Analysis
WHO	World Health Organisation

SUMMARY

The World Health Organisation (2001) reported that approximately 10% of adults suffer from mental disorders, and that during their entire lifetime, more than 25% of individuals develop one or more mental disorders. They also estimated that mental disorders accounted for 10.5% of the global burden of disease in 1990. This increased to 12% in 2000 and is expected to reach 15% by 2020 (WHO, 2001:19).

Since 2002, BasicNeeds has implemented programmes in Ghana. Comic Relief funded the pilot programme known as 'New Initiatives in Mental Health and Development in Northern Ghana. In 2004 the Accra programme commenced and was designed to advocate more strongly for the integration of mental health and development services within both the government and non-government sectors. Currently, BasicNeeds works with 16278 people with mental disorders or epilepsy in Ghana.

Together with its partners, BasicNeeds Ghana has brought about significant changes in the lives of people with mental disorders or epilepsy. For instance in partnership with the mental health unit of the Ghana Health Service, BasicNeeds has facilitated access to community based treatment services. In addition, BasicNeeds has through its livelihood partners, implemented sustainable livelihood programmes that has enabled 3635 go back to earning income. One of such is the horticulture project that also serves as a treatment therapy.

The aim of this study is to review the field experiences of BasicNeeds Ghana horticultural projects and the impact it has had on poor people with mental disorders or epilepsy. This study describes the successes and challenges of these horticultural projects for stabilised people with mental disorders or epilepsy. It draws on field-based discussions and interviews and a participatory data analysis with users at the site and other key informants.

The project has had positive impact in terms of enhancing their mental health, improved capacities to work, improved social interaction and integration and provision of food for users, their families, destitute people with mental disorders, and the wider public as a whole.

Recommendations have been made by those enrolled at the site as well as key informants who were interviewed. These include expansion of the farm size to cater for other interested people with mental disorders, purchasing of a mini-bus to transport those who stay far from the project site, institution of an annual award for hard work and certification for those who pass out and researching into the best means to reduce post-harvest related losses.

Key policy recommendations have also been made. These are:

- Policy makers to expand agriculture to include horticulture and the creation of an enabling environment to increase the participation of stabilised people with mental disorders.
- Horticultural farmers who receive training from the government should be extended to people with mental disorders who are involved in small-scale horticulture.
- The hospital and the project management should liaise with the Ministry of Food and Agriculture to enable the farm benefit from specialised agricultural extension services.
- The Pantang hospital should re-introduce "Feed-Patients-On-the-Farm programme to serve as motivation for those who train on the farm and encourage others to join in.

1.0 INTRODUCTION TO THE COUNTRY PROGRAMME

Since 2002, BasicNeeds has implemented programmes in Ghana. Comic Relief funded the pilot programme known as 'New Initiatives in Mental Health and Development in Northern Ghana. In 2004 the Accra programme commenced and was designed to advocate more strongly for the integration of mental health and development services within both the government and non-government sectors. Currently, BasicNeeds works with about 17,000 people with mental disorders or epilepsy in Ghana.

Together with its partners, BasicNeeds Ghana has brought about significant changes in the lives of people with mental disorders or epilepsy. For instance in partnership with the mental health unit of the Ghana Health Service, BasicNeeds has facilitated access to community based treatment services. In addition, BasicNeeds has through its livelihood partners, implemented sustainable livelihood programmes that have enabled 3635 back to earning income.

2.0 LITERATURE REVIEW

The Global Picture of Mental Health

The World Health Organisation (2001) reported that mental illnesses are common and that more than 25% of people suffer from it in their life time. They also estimated that in 1990, mental disorders accounted for 10% of the total DALYs lost due to all diseases and injuries. This increased to 12% in 2000 and is expected to reach 15% by 2020. Low and middle-income countries like Ghana will share in this burden. This view has been supported by Murray and Lopez (1996).

Mental Health Situation in Ghana

It is estimated that neuropsychiatry disorders are becoming the leading causes of disease burden worldwide. In low and middle income countries including Ghana, one out of every ten Disability Adjusted Life Years (DALYs) is estimated to be lost to a neuropsychiatry condition (Whiteford et al, 2001). There have not been any statistical estimates about the number of people suffering from neuropsychiatry disorders in Ghana. However, based on the World Health Organisation estimates of people suffering from mental illness, some extrapolation can be made for Ghana. The WHO world-wide estimates indicate that, up to 5% of the world population may suffer from neuropsychiatry conditions while 1% suffers from severe mental disorders during their lifetime. (WHO, 2001) Thus, Ghana with a population of about 20,200,000 may have 1,010,000 and 202,000 people who may suffer from neuropsychiatry conditions and severe mental disorders.

The Burden of Mental Illness

WHO (1997a cited in WHO, 2001) found out that mental and behavioural disorders have a large impact on individuals, families and communities. The burden on families' range from economic difficulties to emotional reactions to the illness, the stress of coping with disturbed behaviour, the disruption of household routine and the restriction of social activities.

1.1 billion people continue to live in extreme poverty on less than US\$1 a day. Another 1.6 billion live on between US\$1–2 per day. (Von Braun et al., 2004 cited in Weinberger and Lumpkin, 2005) This situation is worse for people with mental disorders. Several studies have shown that an intricate link exists between the incidence of mental disorders and chronic poverty. Appiah-Kubi et al (2006 p 40) explained that, in addition to the direct treatment costs, people with mental disorders incur indirect economic costs such as lost earnings and productivity as well as their carers inability to work. This is particularly true for Ghana where traditionally, many family members take care of the sick. According to Appiah-Kubi et al (2006, p.42) indirect economic costs of mental health is as high as 15 times that of the direct treatment costs of mental illness'.

Shoba et al (2006 p.29) noted that mental illnesses have multiple negative influences on family, community acceptance and economic participation. They examined the economic situation of people with mental disorders in Ghana before their illness. This showed that, majority of those sampled were engaged in one form of income generating activity or the other and that they had lost their jobs as the illness reduced their capacities to do normal work or earn an income to support the families.

Studies have also shown that there are social costs implications arising from the stigma faced by people with mental disorders themselves and their families. This stigma is translated into the absence of mental health in most policy documents and poverty reduction programmes. The Ghana Living Standard Survey (GLSS) (4) for instance identify the extreme poor, the vulnerable and the excluded to include: rural agricultural producers, children in difficult circumstances, people living with HIV/AIDS, displaced communities, disadvantaged women, residents of urban slums, the elderly who have no access to family care, physically challenged persons especially those with no employable skills, people suffering from chronic diseases (tuberculosis, buruli ulcer, guinea worm, trachoma bilharzias and breast cancer), drug addicts, victims of harmful traditional practices and the unemployed. This excludes people with mental disorders and emphasise the argument that such vulnerable groups of people are conspicuously missing from policy documents and discussions.

Mental illness, therefore, is not only a clinical issue but also a developmental problem. It constitutes a major socio-economic challenge to the world at large and specifically in low and middle-income countries of including Ghana. This challenge must be overcome since good health is not only a basic human need but also a fundamental human right and a prerequisite for economic growth (Streeten, 1981)

Horticulture programs for People with Mental Disorders

This section begins with definition of horticulture. It also provides some examples of horticulture programs for people with mental disorders. It must be noted that most of the literature reviewed on horticulture programs for people with mental disorders come from developed countries.

Janick (1979 p.1) defines horticulture as the subdivision of agriculture dealing in gardening, in contrast to agronomy which deals with field crops and the production of grains and forage. Fillipski (2008) explains that horticultural therapy is an innovative treatment method using plants and plant-related activities to improve the social, educational, psychological and physical adjustment of an individual thus improving his/her body, mind and spirit.

Dennis, a horticultural therapist (1994) explains that groups for which horticultural therapy has proven to be beneficial include people who are physically disabled, people with mental disorders, elderly, substance abusers, public offenders and socially disadvantaged.

Worden, et al. (2004) observed that horticulture has been used as a therapeutic treatment modality for centuries. In order to illustrate this point, they referred in their article to 1812 when Dr. Benjamin Rush, a professor of the Institute of Medicine and Clinical Practice at the University of Pennsylvania documented that gardening improved the conditions of people with mental disorders and distinguished male patients who recovered from their mania from those that did not. In the same article, they indicated that in 1806, Spanish hospitals used horticultural activities for people with mental disorders. They further illustrated that gardening as a means of physical and psychological rehabilitation was used in Veterans administration hospitals for wounded servicemen in the USA.

The Hayes horticultural project, for instance, plays a therapeutic role in the daily lives of people with autism. The project grows vegetable and fruit crops. It is used as a strong educational tool as it illustrates growth and change in a uniquely visual way. Gardening is used to develop sensory skills in people with autism who may become distressed. By working on the garden through sowing to harvesting, people with autism learn to understand their senses and cope with the world around them, learning to separate different senses such as smell, colour, noise and touch. Through this project, some trainees re-established good relationships with their parents and members of their family. It also helped to build their self-confidence and self-esteem. Furthermore, the experience they acquired equipped them with skills that enabled them gain employment. (The National Autistic Society, 2008)

The Green Wellie Horticultural Project is an employment training scheme which gives trainees the opportunity to learn a range of horticultural skills in USA. Trainees (people with learning disabilities or mental health needs) learn how to grow vegetables and bedding plants, as well as producing decorative items like Christmas wreaths and hanging baskets. They also learn about health and safety, customer services and develop team-working skills. The project supports trainees to develop their maximum potential and learn skills which will enable them to enter the job market, with or without continued support. The highest standards of production are encouraged so that Green Wellie products can compete in the marketplace. Trainees may attend for up to five days a week depending on their assessed needs. Transport is provided for trainees. (Torfaen Health and Social Care, 2008)

The Hope Therapy offers horticultural therapy and education and vocational training for persons with a wide range of physical, mental and emotional disabilities. The horticultural therapy utilizes horticultural activities directed by a horticultural therapist to improve psychological, social, educational or physical adjustment in people. Vocational training is also an important part of the program. This provides the opportunity for individuals with disabilities to develop the necessary skills to gain and maintain a job. Many people who have been part of this programme have regained their confidence and improved their sensory awareness and motor abilities. (Moody Gardens®, 2009)

This underscores the importance of horticultural programs for recovery and general improvement in the welfare of people with mental disorders. The programs have been successful because of the following reasons:

- Working in gardens (greenery) has been found to be curative. According to the American Horticultural Therapy Association, garden is therapeutic in nature especially when it has been designed to meet the needs of a specific user or population.
- The horticultural programs as described bring together people with similar problems. As they interact with one another, it develops their social skills and provides healthier patterns of social functioning which reduces their stress and improves their mood and sense of personal worth.
- Another component of the horticulture program is the training that enables individuals to work either independently or semi-independently. By learning how to sow, weed, water and harvest, it stimulates their memory and improves concentration which provides stability in their conditions.
- The physical benefit people with mental disorders derive from working in a horticultural program promotes good physical health. It also reduces their idleness and helps alleviate depression and improves upon their mood thereby ensuring a sense of stability.

Overall, in terms of the benefits that accrue from horticulture therapy, Wonders, et al., (2004) stressed that physical, mental, social and creative abilities are enhanced through horticultural

therapy. Hewson (2001) states that the therapeutic environment of a garden or conservatory, lower anxiety and stress, and promotes self-esteem. He added that documented research shows that horticulture as a therapeutic intervention has helped to maintain, and improve, client's physical, cognitive, emotional and social and cultural functioning. Filipski (2008) also observed that horticultural therapy has been used to improve mobility, balance, endurance, socialization and memory skills.

Horticulture Programmes in Ghana

Available literature on horticulture programmes in Ghana provided the following few examples.

The Agricultural Institute of Canada initiated a horticultural project in the Upper West Region in Busa, Karni and Babile communities. This project was designed to fill the hunger gap in farming communities by complimenting food and nutrition security with cash security. In the long run, this intervention also served to provide jobs for the youth and thus stem the seasonal migration to plantations in the south of Ghana in search of livelihood.

Activities of members in the villages in the Upper West have had a major impact on increasing the knowledge of farmers in the techniques required for growing a wide range of vegetables more efficiently. These vegetables serve as a source of food during the dry (hungry) season and as a source of revenue generation as they are sold through the markets. Practices such as reduced pesticide use and the production and use of compost are enhancing the environmental sustainability of their farming practices.

Though they have plans to conduct studies to determine the effect that HIV/AIDS is having on the agricultural productivity of the target villages, people with mental disorders are completely left out of this project. (The Agricultural Institute of Canada, 2009)

Technoserve, with support from the U.S Agency for International Development helps entrepreneurs to build their businesses through the horticultural sector by selling high-value exports such as pineapple, papaya and mango. They learn to improve their operations and manage their businesses more competitively, thus increasing incomes and creating jobs. They have worked with industry stakeholders to build an efficient processing chain and developed Ghana's reputation for consistent and high-quality exports. They also help farmer associations to produce and market citrus, onion, tomato and other crops for a growing urban market. (Technoserve, 2009)

The Ghana Export Promotion Council (GEPC) on the other hand offers horticultural training programmes for group of farmers or product associations in communities in the following modules:

- Best Agricultural Practices for selected fruit/vegetable crops
- Harvesting, Sorting, Grading and Packaging of vegetables for export

From the review of literature available, horticultural programs in Ghana has excluded people with mental disorders. However, the Accra Psychiatric Hospital has an occupational therapy centre since 1968. This centre trains stabilised people with mental disorders to acquire skills in carpentry, shoe making, tailoring and in art work.

BN Horticultural Programme

The description and advantages of horticultural projects such as therapeutic, social, physical, psychological and economic benefits as espoused by the literature reviewed are similar to the reasons that underpinned the establishment of the horticultural projects in Ghana.

BasicNeeds currently operate horticultural projects in Ghana, India, Sri Lanka and Tanzania. People with mental disorders face stigma and they lack essential skills to enable them to work or re-integrate into their communities. In consultation with people with mental disorders or epilepsy, they explained that they had been out of work for a long time due to their ill health. They expressed interest in acquiring some skills to enable them go back to earning income. BasicNeeds set up the horticultural projects to engage them in gardening activities as a livelihood option, an income earning venture and treatment therapy.

In Ghana, there are two horticultural projects; The Tin Laayisi (meaning, 'We will rise again') Horticultural Project in Tamale and the Pantang Horticultural Project in Accra. Each one is supported by a professional gardener/farm manager who has some basic training in psychiatry. People with mental disorders or epilepsy who have experienced reduction in their symptoms and who express interest are allowed to join the project based upon a confirmation from the Community Psychiatric Nurse of having attained a level of stability. The farm managers support users in this process by assisting and teaching them how to nurse, plant and harvest vegetables.

The Tamale horticulture project is located at Datoyili, about 10 km to Tamale Metropolis. The project is on a one and half acre piece of land, near a stream and generously donated by the local chief. The project which started in 2004 with an initial 10 stabilised people with mental disorders or epilepsy grows vegetables and is run by the stabilised mentally ill people themselves with the aim of making it self-sufficient. BasicNeeds secured £15,500 from two Charitable Trusts; Clothworkers and Ryklow towards the costs of setting up the "Tin Laayisi" project.

In Accra, the Pantang Vegetable garden Project was designed in collaboration with the occupational therapy department of the Pantang Hospital to support and build self-reliance amongst stabilised people with mental disorders through gardening skills. The project began in February 2007 with 50 people made up of 20 females and 30 males who had been discharged but were still in the hospital. It provides means of supporting the de-hospitalisation of patients who have long stabilised but have remained in the mental hospital with nowhere to go. The project was funded by the Jersey Overseas Aid Commission (JOAC) with a total amount of GBP£20,810.

These two projects have proved to be largely successful and have already provided means to returning to work for those who have participated in it.

3.0 THE STUDY

The aim of this study is to review the field experiences of BasicNeeds Ghana horticultural projects and the impact it has had on poor people with mental disorders or epilepsy.

3.1 Research Questions

To achieve the aim the study, two questions were explored. These are:

- a. What are the successes and constraints of the horticulture project according to both user and stakeholder perspectives?
- b. In what ways can the horticulture project be strengthened?

3.2 Scope of the study

This study covered two horticultural projects in Tamale and Accra in the Northern and Greater Accra Regions. The study covered the successes and challenges of the horticultural projects for people with mental disorders.

3.3 Significance of the Study

The study examines the impact of the horticultural projects on people with mental disorders or epilepsy. It is very relevant for NGOs, mental health professionals and the government who will be interested in using the learning and successes gained to replicate similar projects in Ghana for people with mental disorders or epilepsy.

3.4 Methodology

3.4.1 Data Sources

To understand how the project is impacting on people with mental disorders or epilepsy and how they feel about it, qualitative methods of collecting data were used for the study.

Two focus group discussions were held in Tamale and Accra with people with mental disorders or epilepsy who work on the horticultural projects to explore their perceptions and concerns on the project. All those who train at the sites were targeted to participate in the discussions. However at the time of the study, 33 people comprising 26 males and 7 females were available for the discussions. A question guide was used to aid in the discussions. (Appendix 1)

Demographic information including income earned by users was collected from their individual files. (Appendix 2)

Key informants such as the Farm Managers in Tamale and Accra, three Community Psychiatric Nurses (CPNs) in Tamale and Accra, the Kitchen matron of Pantang hospital and a doctor in Tamale in charge of Shekinah Clinic, BasicNeeds partner were interviewed. With the use of a questionnaire (see Appendix 1), more in depth and insight into the area of study was gained.

Visits to the project sites were made in order to get first hand information about what happens at the horticulture project.

Existing documents such as donor reports and activity reports of the horticulture project as well as other related documents were reviewed.

3.4.2 Process of Data Collection

Focus Group Discussion

The two Research Officers in Tamale and Accra (Truelove & Evans) notified people with mental disorders or epilepsy who work at the sites of these discussions through their farm managers. A date was scheduled with them and a venue for the discussion was agreed. In Tamale the discussions were held at the project site with nine people participating, whiles in Accra 24 people had discussions at the conference room of the hospital. In order to get demographic information from users, they were asked to bring their individual files to the venue. In total, forty-two people were expected to participate but thirty-three turned up for the discussions.

For ethical reasons, permission was sought from users to document, take photographs, and disseminate the findings. They agreed verbally and gave their unanimous endorsement that photographs could be taken and that information generated from the discussion could be disseminated or shared. Truelove facilitated the discussions in Tamale and recorded by writing. Evans did the same for Accra.

Interviews

Phone calls were made to the CPNs and other key informants notifying and requesting for their time for discussions. With preliminary agreements reached on phone, the research officers visited key informants on agreed dates and venue to discuss the study in detail.

Observations

The research officers made visits to the project sites prior to the focus group discussions to observe users working, and to get verifiable information about what actually happens at the project site and how things are done. For instance, the research officers took the opportunity to observe the vegetables under cultivation and the attention the workers gave to the farm in terms of clearing the weeds.

Evans also visited the Pantang kitchen to see the use to which vegetables from the farm are put.

3.5 Data Analysis and Report Writing

Participatory data analyses¹ (PDA) were done with users, supervisors and CPNs using themes generated from the FGDs. A date was scheduled with participants after the FGD for the PDA. The research officers initially grouped responses from data collected during the FGD under themes arising from the discussions such as the type of activities undertaken, benefits gained from the project, constraints faced and recommendations. These were read aloud since many of them are non-literates. Opportunity was given for amendments to be made based upon corrections and comments from the users. The research officers asked further questions to gain clarity on data collected. The CPNs also gave valuable inputs.

Further analysis using the themes was carried out by the research officers to ensure incorporation of additional information collected from the PDA, secondary data or through further interaction with the farm managers.

The responses recorded in the form of field notes during the FGD and PDA were synthesised into two different reports (Accra and Tamale) by the research officers since the study covered the two areas. These two reports were later consolidated into one country report by Truelove, the Policy Research Project Officer, Tamale with support from the Country Programme Manager.

¹ PDA is an approach that recognises the role of different stakeholders in the analysis of data. This approach enables all stakeholders who participated in the FGDs or were interviewed to make meaning out of the information they generated and to make additional inputs or otherwise into data collected.

4.0 DATA PRESENTATION AND ANALYSIS

Demographic Characteristics

4.1 Sex and Age Distribution of the people with mental disorders

33 people with mental disorders or epilepsy participated in the focus group discussions. This is made up of 26 males and 7 females representing 78.8% and 21.2% respectively.

The data showed that all the people who took part in the discussions are adults. For instance the youngest who took part in the FGD is 21 years whilst the most elderly person is 57 years.

4.2 Education

Analyses of the data revealed that 18 (54%) were not literate. In terms of data variations, Accra had the highest number of non-literates 16 (67%). In total, 1 person had a tertiary education, 5 people were senior high school graduates; 4 had Junior High School education, 3 had some primary level education whilst the remaining two attended adult literacy classes. It is relevant to indicate that all those who were in school had to terminate their education at the onset of the illness.

4.3 Marital Status

Despite the fact that all the people who participated in the FGD are adults, only five out of the 33 respondents are married. Those married are men. In a participatory analysis with respondents, they explained that the mental illness inhibited them from socialising with friends. Mental illness is considered as a disgrace and so people will not want to be associated with people who suffer it. This situation as they indicated is worse for women who suffer from mental disorders. After gaining stability, some men are able to propose to women and get married unlike women who will naturally have to wait to be asked for a hand in marriage.

4.4 Mental Illness Details

4.4.1 Diagnosis

Out of the 33 people, 26 are suffering from schizophrenia, 3 substance abuse cases, 1 abuse of alcohol and 3 epileptics. The majority of them representing 78.8% suffer from severe mental disorders.

4.4.2 Duration of illness

The duration of their illnesses ranged between 1-35 years. 8 people had suffered the illness between 11-15 years. The next group of 6 ranged from 1-5 years. 10 people; five each had suffered their illness between 16-20 and 26-30 years. 4 had suffered the illness between 6-10 years. Only 1 had suffered it for 35 years while 1 person could not tell how long he has been sick. A significant number (27) have been ill for over 5 years. This has serious economic implications on the person and the family.

4.4.3 Length of Stay at the Hospital

Put together, the 24 people with mental disorders in Accra who participated in the discussion had stayed in the hospital for 339 years, with an average number of years stayed at the hospital at 14. The person who has stayed longest in the hospital has been in the hospital for the past 31 years and the one with the least period of stay has been at the hospital for one year. Even though these people are stabilised, their relatives have lost interest in coming for them because of stigma and the fear that they will be a burden to the family. It is also possible that the de-hospitalisation

programme of the hospital and their home tracing activities suffer some deficiencies and this makes people remain in the hospital.

4.5 Horticulture Activities Undertaken

The types of activities that are undertaken within the garden include:

- Clearing of land
- Raising of beds
- Planting of crops
- Seedbed preparation for nursery with the exception of cucumber
- Watering of crops
- Harvesting
- Selling of farm produce

Eight main vegetables have been cultivated each cycle – cabbage, pepper, onion, carrots, sweet pepper, cucumber, garden eggs and tomatoes. Maize and kenaf have only recently been grown in Tamale. Dry season gardening is not common in the northern parts of Ghana. Though it is small scale farming, it has introduced users to vegetable gardening to a large extent and served as an alternative to farming.

4.6 Reasons for joining the project

The stimuli for joining the project are:

- Improved Capacities
 - ⇒ To be engaged in doing something and not to be idle. Nindow had this to say, “I was too idle so I wanted something to occupy me.” “It is better to work and not have money than to be idle. It creates more room for temptations such as stealing”, Nana. “I am no longer idle. My energy has now been diverted from walking about aimlessly to doing productive work”, Aminu².
 - ⇒ To acquire skills and establish their own farms and sell produce gained for money. Ahmed Abdulai says, “I have had adequate skills and knowledge about the types of vegetables and how to grow them. Very soon I will start my own and make money.” “
 - ⇒ To reduce stress and depression and improve their quality of life. Wangara Asante says, “Gardening is part of treatment. When we work in the garden, we sweat and in the process get healthy.
- Social concerns
 - ⇒ To interact with people who have similar problems in order to recover faster.
 - ⇒ To have a sense of belongingness. “At least I have a group I belong to. We encourage one another and undertake home visits if somebody does not come to work.”
- Personal philosophy
 - ⇒ Personal commitment in learning and setting up gardening farms. In the Northern parts of Ghana for instance, farming is the main occupation for most of the people. People with mental disorders who work at the site mentioned that they have always longed to farm with their families but this has not been so because of their ill-health. Joining the horticultural project to them has brought them personal satisfaction and increased their sense of pride and accomplishment.

² Source: Life Story of Aminu, ‘The Experience is Real’ written by Dokurugu Adam Yahaya (Community Mental Health Officer, BasicNeeds) on 7/01/06.

- Daily Sustenance
 - ⇒ There were a few who added that they were motivated to join the project because they would get some of the vegetables to prepare meals. One person said as soon as he started work at the site, his relatives kept on asking when he will bring vegetables home.

Though individual users had varied reasons for joining the project, the skills acquired and the economic benefit they hoped to gain is the latent driving force. Social goals such as being accepted and recognised by their family members, according to them, automatically follow from their recuperation, the skills gained and ability to support their families with food.

4.7 Impact of the Project

People who work at the sites and key informants interviewed have all have found the programme to be of tremendous benefit.

4.7.1 Direct Impact for Users

Increased Capacity of Users

With support, people with mental disorders or epilepsy who work at the site have gained greater life skills and have started achieving personal goals that were previously out of reach. Fuseini Mumuni, a CPN in Tamale, observed that there have been a lot of changes in those who work at the site. He explained that, they have improved in their personal hygiene. He also noted that some of them have put on weight because of the peace of mind and the interaction they have with one another. This could also be attributed to better nutrition. He added that the work they do at the site is a healthy exercise and therapeutic for them as it has helped in reducing their symptoms. The farm Manager in Accra also revealed that his personal observation is that the people who work at the site recover faster than their colleagues at the wards who do not take part in the farming activities.

The horticultural project plays a therapeutic role in the daily lives of users. According to them, it has contributed significantly to the improvement in their condition. The therapeutic effect is so obvious that the driver in Tamale who picks them up each morning to the project site noted this: “Since I started conveying them, I have seen a lot of changes. They no longer talk to themselves. They have improved outlook now and one can easily notice the difference. They are now a happy group.”

A Psychiatric Nurse in Accra, Ms. Margaret Patterson said the garden has served as an avenue to put into use human resources that would have otherwise been allowed to go waste at the wards. She cited Joyce Effah as someone who before the advent of the gardening project, frequently relapsed and used chalk to write illegible things on the walls of the hospital and in the process defacing the structures. According to her, Joyce now takes part in selling the farm produce.

In Tamale, four of the people who work at the site have put into practice the skills acquired, by farming beyond the fence at the garden. For those who have not been able to establish their own farms yet, they explained that the money realised from the sale of the produce constitute a key source of income for them. Participants of the project feel proud to have earned income from their activities. In addition, each worker in Tamale and Accra is given fifty pesewas to supplement their food expenditure. It was realised that this token has always fuelled their enthusiasm to contribute their maximum effort on the garden.

They have learnt to market their own produce with little support from the farm managers. It is often said that ‘production is not complete until the goods reach the final consumer’. This experience gained is significant because they have been able to be part of the entire cycle of production to selling out what they have produced themselves.

Social Benefits

Those who work at the sites are delighted about the friendship they have developed as a result of working as a group. “When someone is not able to come to work, we all visit the person. It is heart warming to belong to such a group.” “Apart from the work, the farm has become a place for exchanging ideas and sharing personal problems and experiences.”

Some of the people who work at the site have been re-united to their families as a result of the skills and the level of stability gained. (Read Ahmed’s story in Box 1) Joyce also testifies, “My sisters visited me recently and were marvelled when they saw me selling pepper, garden eggs and other farm produce. I realised that since then, their visits to me have become more regular. They told me that if I am able to do this kind of work, then there is no need keeping me at the hospital.”

Economic Gains

People with mental illness or epilepsy are often forgotten and economically marginalised. They lose their jobs at the onset of the illness and find it difficult to get integrated into the society even when their conditions are stabilised.

There has been an increase in their self-reliance for food as a result of the project. They are able to send some of the harvest home for meals and also sell the rest. They mentioned that they have had indirect financial gains because they now get vegetable which hitherto, they were buying. “When we started working, my family members always asked why I was working and not bringing anything home. I told them I was learning and at the appropriate time, I will be able to bring something home. Now I send cabbage and other vegetables home and they are happy to cook it.” “This work is correct. I am able to send some of the produce home.” This has increased their autonomy and has been a confidence building tool as they have gained much respect and improved image from their families.

BOX 1

Ahmed Abdulai, popularly known as ‘Senior’, is a stabilised person who suffered from manic psychosis. He had to stop his secondary education at the onset of the illness and lived in a cemetery as a destitute.

Senior was among the first batch of seven people with mental disorders who started work at the Tin Laayigsi Horticultural project in Tamale. According to the farm manager, he is an invaluable member of the project team because of his punctuality and keen interest in gardening. Senior developed a positive and trusting rapport with the farm manager and his colleagues which helped to build his self-confidence and self-esteem. Furthermore the experience equipped him with the skills that enable him to start farming on his own.

With support, he has greater personal control over his own future, including a career working in horticulture. Working on the project has enabled his to get re-united to his family.

Source: Field Survey, 2008

Improved Feeding

Dr. Abdulai, BN partner in Tamale says he receives fresh vegetables twice a year from the farm. He described the vegetables as of high nutritional value because it is organic. This, he says, supplements in the destitute feeding programme for people with mental disorders or epilepsy in the Tamale Metropolis.

In Accra, the hospital Matron confirmed that with the produce from the site, it has helped to enrich the diet and this has kept the patients healthy. Moreover, the hospital staff get the opportunity to buy the vegetables at a relatively cheaper price than would otherwise have been the case if they bought them from the open market. They noted that as they buy the vegetables almost at the farm gates, they are certain that they are buying fresh vegetables.

4.7.2 Long term Impact

Increased Sustainability of the Project

According to the farm supervisor in Tamale, at first BN was fully sponsoring the project but now from the sale of the produce they are able to buy petrol for the water pumping machine and seeds for cultivation.

Increased Recognition of BasicNeeds in Ghana

The project has attracted visitors from people of all walks of life who visit the sites to see for themselves what they have heard in the news or have been told. The project has also served as a demonstration for many groups of people. A farmer group from within Tamale have paid visits to the project to familiarise themselves with gardening. "People who are not mentally ill want to even join us. Others who live around have secretly watched us work and have started their own gardening around. (Yaro, 2006) The outcome of this is the selection of the Tamale horticultural project by the Ministry of Food and Agriculture, Tamale Metro Directorate as one of its demonstration sites.

Environmental Impact

Organic farming has been known to be an environmentally benign form of agriculture. According to the farm managers, they use compost manure as compared with the use of chemicals in the conventional systems. Neem oil is used to control pests as opposed. All these combined help to ensure that soil fertility is maintained.

4.8 Challenges

Though Shekhinah Clinic provides a vehicle to convey those who work at the site to and from work in Tamale, the driver is sometimes not available to pick them up because of other work schedules. Even when the vehicle is available, it cannot accommodate other stabilised people with mental disorder or epilepsy who stay far from the project site and who have expressed interest in participating in it.

In Tamale, workers also explained that the farm size is currently too small for them and needs to be expanded to allow for trials on their own. According to Nindow, they will virtually be idling if more people with mental disorders or epilepsy are recruited with the current farm size.

They also noted that, frequent shortage of psychotropic medicines do not augur well for their health and the kind of work they are engaged in. When their medicines are finished, they relapse and they have to stay at home.

Another key challenge facing them is the fact that horticultural crops are often highly perishable. This restricts the ability of users to store them to cope with price fluctuations coupled with the unavailability of a post harvest facility for storage. Consequently during the glut, they are forced to sell at dictate prices from buyers.

As a result of the weak fencing in both projects, children break into the farms to pluck vegetables before they are ready for harvest. Pests are equally a main challenge to farmers. They invade and eat the vegetables and this reduces harvest significantly. The farm supervisor in Tamale explained

that in organic farming, neem oil is used to control pest as against the use of chemicals in the conventional farming. He said the neem oil is difficult to come by and it is very expensive.

A psychiatric Nurse in Accra identified the intermittent breakdown of the submerged water pumping facility that BasicNeeds supported with, as one major setback to the vegetable garden. Explaining further, she said the constant breakdown of the pump could be attributed to the excessively high electric voltage that is needed to use the machine. Any time the pump breaks down, some of the crops are not watered and as a result some of the crops that are not able to withstand long periods of drought withers away and this affects the yield from the garden.

The programme of the Pantang hospital to discharge stabilized mentally ill people from the hospital has been noted as huge challenge to the vegetable garden. Even though unintended, this means there are no permanent hands on the farms for a long time and this disrupts farming activities of the farm. In other words, as a person acquires skills on the farm, he/she is discharged and new hands have to be introduced onto the farm. According to the farm Manager, this affects long term planning by the farm management.

Of a potentially more serious nature, there has been a dam for irrigation of which workers in Tamale use its overflow for their work. Users are concerned that if they do not build a wall to block the water and retain it, when the dam is broken there will be no water for them to use.

5.0 KEY FINDINGS

- Approximately 79% of stabilised people with mental disorders who work at the horticultural project site are males suggesting a gender imbalance.
- As high as 84.85% of people working at the sites are not married.
- All literates who participated in the FGD had to stop schooling because of their ill-health.
- There are varied reasons that motivate stabilised people with mental disorders to join the horticultural project. These include acquiring skills, having interaction with people and having a personal commitment to learn gardening.
- The project has impacted positively on the lives of people with mental disorders and their families in terms of increased gardening skills, capacities, improved social interaction and integration and self-reliance for food.
- The study confirms that once person with mental disorders can function well in terms of being useful to themselves and to their families, it reduces the social stigma associated with mental illness and epilepsy and this helps in effective re-integration.
- For people with mental disorders to participate effectively in gardening, there is the need for a professional gardener and a community psychiatric nurse.
- Horticultural products are highly perishable. This restricts the ability of users to store them to cope with price fluctuations.
- Successful horticultural projects require harnessing of resources and commitment from stakeholders. Small farmers will require considerable support/incentive over the initial years.
- Organic production system require higher cost of inputs notably compost preparation and application and pest management.

5.1 Strengths

- There are no previous studies conducted on horticulture for people with mental disorders in Ghana. This study therefore contributes to filling this huge gap.
- The data collection was interactive as the study forms part of BasicNeeds ongoing interventions with stakeholders who are already working together in BasicNeeds programme.

- The participatory methods used for data collection and analysis helped to generate evidence from people with mental disorders or epilepsy themselves and how the horticultural projects have impacted on their lives. This is a strong tool for advocating for their inclusion in socio-economic and health policies in Ghana.

5.2 Challenges/Limitations

In FGD, participants may want to please the facilitator or try to fit in with the group. This is a potential challenge to data collection.

Researchers' presence in the field in terms of observing users working can influence their behaviour and what we saw may not be typical of what happens when we are not present.

6.0 DISCUSSION

People with mental disorders have been stigmatised and excluded from participating the development processes. Even when they have experienced reduced symptoms in their conditions, the stigma still persists. The general perception about such people is that they cannot contribute to their own development or the development of their families and communities.

6.1 Improved Health Conditions

From the literature reviewed, it is proven that making people with mental disorders participate in horticultural programs can be of immense benefit to them and their families. For instance it was documented by a Professor at the University of Pennsylvania that gardening improved the conditions of people with mental disorders and distinguished male patients who recovered from their mania from those that did not. This is particularly true for people who train at BN horticultural sites. The findings confirm an observation made by a CPN that people who work at the sites recover faster than those who did not.

6.2 Increased Capacities

The Hayes and Green Wellie Horticultural projects that were reviewed mention that such projects have been powerful educational tools for people with learning disabilities and mental needs. This relates positively with findings from this study. The Pantang and Tin Laayisi horticultural projects have unearthed the innate capabilities of people with mental disorders or epilepsy and enabled them to acquire valuable skills to make contribution to development. Some have already started working independently on their own farms.

6.3 Self-Reliance for Food

This learning and skill acquired is what they depend on for their daily sustenance and the vegetables they harvest are able to feed themselves and their families just as the Hope Therapy has offered to persons with a wide range of physical, mental and emotional disabilities. This is also true for The AIC Horticultural project in the Upper West Region, Ghana. The vegetables they produce serve as source of food during the dry season as a major source of revenue for the farmers.

6.4 Enhanced Re-integration

As a result of improvement in their health conditions and their ability to work and feed themselves and their families, they have had improved relationships with their families which hitherto was not like that. From the literature, the Hayes horticultural project enabled someone suffering from a mental disorder regain his confidence and self-esteem and go re-united with his parents and members of his family for the first time in 10 years. The findings from this study did indicate that 'Senior' and Joyce in Tamale and Accra, both got unified to their families when the latter realised

that they could now contribute meaningfully to themselves, the family and community as a whole. This has reduced the social stigma they once faced.

6.5 Improved Social Skills

Filipski (2008) documented that horticulture improves socialization skills of those involved. The Green Wellie Horticultural project for instance has built the team-working skills of trainees. This study corroborates this observation. Users expressed that they feel happy because of the social interaction they have with one another. They said being together allows for encouragement, provides a sense of community, common identity and acceptance, improves their self-esteem which goes a long way to enhance their rapid reintegration into families and communities.

6.6 Environmental Sustainability

Finally, the review found out that the AIC horticultural project engages in best practices such as reduced pesticide use and application of compost manure which ensures sustainability of the environment. This is particularly true for BN's horticultural projects in Tamale and Accra. The Farm Managers revealed that the use of Neem oil to control pest and the use of compost as opposed to the use of chemicals have maintained the fertility of the soils even though this has higher cost implications as compared to the use of chemicals.

As the review suggests, poverty exacerbates mental illness and also makes it much harder for individuals to manage their own recovery and the illness itself. It follows that integrated development programmes which incorporate forms of learning skills that will help gain and maintain a job can go a long way in alleviating these difficulties.

Many individuals, families, restaurants and hotels have patronised the produce from the gardens. Though in the background, people with mental disorders are making significant impact on our economy. Overall, the literature review and findings of the study reveal a demonstration of group therapy whilst optimising people with mental disorders' potential for work.

Supporting such initiatives that seeks to harness the potential of people with mental disorders and alleviate their plight and suffering is everyone's duty. Available literature reviewed on horticultural programs in Ghana revealed that non-governmental organisations such as AIC and Technoserve as well as GEPC, a government institution have offered support to community groups in this regards. The horticultural projects are the result of the benevolence of many: the Chief of Datoyili who generously gave out a piece of land and understood the need for people with mental disorders to be included in development processes; Shekhinah clinic who released a Nissan Pick-up to convey users to the site; The Pantang Hospital donated the land for cultivation and provided a tractor to ploughing the field.

With effective support and partnership of individuals, NGOs, District Assemblies and other agencies, more people suffering from mental disorders can learn and acquire useful gardening skills that will enable them recover faster and work on their own in future.

7.0 RECOMMENDATIONS

The following recommendations have been echoed by people with mental disorders or epilepsy who participated in the discussions as well as all key informants who were interviewed.

- The farm size should be expanded to include other people with mental disorders who are interested and also to allow individuals cultivate their own gardens.
- There is the need for a mini-bus to transport workers and their working tools to the project site and back. A bus for the project also means more time can be spent on the project with flexibility

of departure for the participants rather than they being rushed to be brought back so as to free the vehicle for other assignments.

- In Accra, there was a call for procurement of an additional tractor as the only one they have experience frequent breakdown.
- BasicNeeds in collaboration with its partners institute an annual award for hard work done and develop a certificate for those who pass out.
- BasicNeeds should support in purchase of equipment such as watering cans
- The fencing in both projects needs to be re-enforced with barbed wire with a gate at the entrance to prevent people from stealing the produce.
- BN should support in finding the best means to reduce post-harvest related losses so that vegetable production would be less risky and attractive.

7.1 Policy Recommendations

- The first goal to eradicate extreme poverty and hunger required to accomplish the Millennium Development Goals depends on raising the productivity of agriculture. Braun, et al., (2004 cited in Weinberger and Lumpkin, 2005, p.16). This agricultural strategy must be expanded to include horticulture for stabilised people with mental disorders. BN horticultural projects have demonstrated that stabilised people with mental disorders can gradually benefit from involvement in horticultural therapy and gradually be reintroduced to farming; one of the main and common occupations for majority of people in Ghana.
- In a similar vein, the increasing urbanization and growing needs of cities like Accra to feed their population will require more attention toward rural, peri-urban and urban horticultural production. Policy makers have to pay much attention to an enabling environment that will increase the participation of stabilised people with mental disorders.
- Government's training for horticulture farmers should be extended to people with mental disorders who are involved in small-scale horticulture.
- The hospital and the project management should liaise with the Ministry of Food and Agriculture to enable the farm benefit from specialised agricultural extension services. This arrangement would allow extension officers from the Ministry to share hands-on experience on various gardening practices.
- It is also suggested that the hospital will consider the re-introduction of the "Feed-Patients-On-the-Farm programme. This was a programme under which the Pantang Hospital collaborated with the World Food programme in the 1990s. Under that relationship, the World Food Programme Offices in Accra supplied wheat and fish for feeding stabilized mentally ill people who worked on a farm the hospital had established at the time. It is expected that such a programme should address problems associated with feeding the workers who train on the vegetable farm. This will serve to motivate those who work on the farm and encourage others to join in.

8.0 CONCLUSION

This study has highlighted the success of the horticultural project which provides evidence for acquiring skills, recovery and stabilisation of people with mental disorders and in the process giving them an opportunity to be involved in the world of work thereby contribution to poverty alleviation and economic development.

The project has successfully improved the productivity, availability and quality of fresh vegetables for improved nutrition not only for those who work at the sites but to their families, other people with mental disorders and destitute who benefit from the meals that is prepared with the vegetables and to the wider public who might have purchased vegetables from market women who go to the sites to buy the produce in large quantities for retail.

The successes chalked by the horticultural projects should spur BasicNeeds on to increase her awareness creation efforts and to advocate the improvement of mental health services by policy makers and donors. When this is done policies and poverty reduction strategies will benefit a significant proportion of forgotten poor people with mental disorders.

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APPENDIX 1

Question Guide (FGD) for People with Mental Disorders

1. Describe the types of activities undertaken at the project site.
2. Mention the reasons for joining the project.
3. What benefits have you gained from this project?

What constraints do you face?

4. Consequences of the constraints.
5. How can the constraints be overcome?

Garden Supervisor/Farm Manager

1. Benefits of the project
2. What impact are they having on the users?
3. What challenges do you face?
4. What is being done to solve the problem?
5. How are solutions being implemented?
6. What do you think can be done to improve upon the project?

Shekhinah Clinic

1. What have been the benefits arising from your collaboration with BasicNeeds on the horticultural project?
2. What challenges do you face?
3. How can these be overcome?

CPN

1. In your view, what are the significant changes in the lives of people who work at the site?
2. What are your recommendations for improving upon the project?

APPENDIX 2

Individual file demographic data FGD #1

	1	2	3
Name			
Place (village, district)			
Age			
Sex			
Education			
Marital Status			
Diagnosis			
No. of years living with illness			
Date/ Month coming into the programme			
Living situation (with whom)			
Current Work/ employment			
Income earned (per day)			