

How disability studies and ecofeminist approaches shape research: exploring small-scale farmer perceptions of banana cultivation in the Lake Victoria region, Uganda.

Bridget Leadbeater^{a*}

^a *Independent researcher, activist & semi-subsistence farmer. Corresponding Author- Email: bleadbea@ntlworld.com*

This paper explores the complex intersections of race, gender and disability, whilst offering a critical reflection on how disability studies discourse and ecofeminist approaches together elucidate a subjectivity that is unique, distinct and influential in generating participatory action research knowledge. Reflection and insights are based on empirical work with small-scale farmers (mainly women) in the central region of Uganda carried out for a PhD study. The study aimed to illuminate the broad and complex livelihood experiences of domestic banana (staple crop) cultivators and their perceptions of bio-technological intervention in the form of banana tissue culture (TC) and the associated processes. Subjectivity between the researcher and respondents is a two-way process. As a researcher who is disabled woman using a wheelchair, working in the field required much adaptation physically and mentally. Equally, my disability shaped respondents' perceptions of me as a person, a researcher as well as their responses. In fact, arguably, my disability facilitated unusual circumstances and opened up doors to sensitive questions, personal accounts and a mutual rapport between the farmers and myself. The influence of the disabled research subject fostered exceptional conditions to propagate inclusive investigative methods to represent 'the lived experience' of the farmer in a procedure not often applied in agricultural research.

Keywords: participatory action research; disability studies; ecofeminism; small-scale farmer; Uganda; race; gender; food sovereignty.

Introduction

Discovering the livelihood strategies people employ and the significance of the banana throughout the Buganda culture, requires utilising authentic participatory and broad-based methods to reflect the diverse lives of small-scale farmers from their own perspective. This is further backed up by my own experience of being a '*disabled researched subject*', which has made it evident to me that inclusive research theory and participatory methods of inquiry are fundamental to rigorous research. As a result this paper considers the complex intersections

of race, gender and disability as well as the unique and important sense in which the position of the disabled subject influences and aids in the research agenda.

An unhealthy reliance on top-down, or imperialistic institutionalised data collected by ‘experts’ (which is often used as ‘indicators of poverty’) within the discipline of development studies is still conspicuous¹. In search of a different direction, this paper explores theoretical connections between ecofeminism and the disability studies dialectic that influences participatory action research (PAR) practice.

The intention was to develop a user-led style of research techniques to encompass the lived experience of the participants. Embracing the broader aspects of livelihoods, extensive interviews took place on the respondents’ farms. Also, the use of photography as a tool in the form of visual diaries, and facilitating farmers to complete life history timelines were selected as the most appropriate methods of enquiry. The consent, by farmers, to participate was resolved by visual rather than written representation.

Disability studies and ecofeminist rationale seem to offer some interpretation of the circumstance of a disabled researcher from the global North facilitating fieldwork assessing the effectiveness of biotechnological intervention programs based in the global South. Ecofeminism can be briefly defined as a movement catalysed by the common concerns and insights of ecological degradation including the loss of food sovereignty by land workers articulated through the struggle of women and men in active participation. Men and women together share consternation about:

...the invisibility of women, and nature worldwide, and the sustaining of the ecological environment on which we all depend is interwoven into the life experience of many women. The diversity of women’s voices and the diversity of flora and fauna are fundamental to the preservation of life. ‘Modernisation’ and ‘development’ have destroyed and colonised women, nature, land and livelihoods of indigenous people. Ecological disasters seem to impact upon the lives of women and often they were the first to protest (Mies et al. 1993: 3).

Similarly, disability discourse may be described as:

...born of activism and a socio-political movement. This approach provides a critique of and a politics to discuss how all groups, based on physical traits or markings, are selected for disablement by a larger system of regulation and signification. It is argued people with disabilities are the most marginalised group thus are able to have the broadest position of understanding contemporary forms of oppression (Davis, 2002: 29).

The association of the differing methodological concepts originate, in part, from a rejection of selected facets of Darwinian (1859) and Malthusian (1766-1834 ed.1914) ideology that justified a grading system to measure the genetic quality of people, accompanied by mathematical formulae developed to give this theory legitimacy (Davis, 1995; Moser and Haraway cited in Shiva and Moser, 1995). Such ideas are not easy to digest, and are expanded upon in Figures 2 and 3. The cognitive and practical activities and processes developed in creating a methodological framework, has in part, been an agonising and gratifying personal journey². Sharing stories and experiences with study participants during the investigative process and acknowledging the disabled subjective perspective instigated unusual research conditions.

The background and research

Uganda is one of the biggest producers per capita of banana in the world, and the majority of bananas/plantains are produced for local consumption and small-scale domestic trade. Therefore they are regarded as an essential domestic, nutritious staple food. In particular, these bananas are grown by small-scale women producers situated in the central region (INIBAP, 2005). Plantains and bananas were recently ranked among the top five food commodities in Africa (FAO, 2012).

Food security and hunger alleviation programmes in Uganda attempt to foster the livelihoods of small-scale agriculturalists through an income generation agenda supported by many International Institutions such as the World Bank (WB), the Consultative Group on International Agricultural Research (CGIAR) and the United Nations Food and Agriculture Organisation (UNFAO). These projects are implemented anticipating that endorsement of TC banana plantlets, alongside their associated agricultural inputs and management practices, will ameliorate declining yields and augment livelihoods.

The intention is to investigate the effectiveness of banana TC intervention programmes. As the majority of participants are farming banana within a 'backyard' or home garden system which entails a complex, mixed cropping regime, an agro-ecological stance is embraced to encapsulate the wider context of banana production. Thus the study is able to offer an insight into acute farmer knowledge of their environment, plus other crop production including species preference and agro-practices employed in banana cultivation as well as customary life around the homestead.

Empirical research achieved over two phases exceeded a six month period in Uganda from 2007- 2009. Forty-seven small-scale farmers were consulted in three differing locations sited within the 'fertile crescent' around Lake Victoria. The study found small-scale farmers felt

banana TC plants worthwhile cultivating, although not as income generation, but rather for giving as reciprocal gifts to extended family, friends and neighbours. Moreover, farmers with disabilities are discouraged and even excluded from banana TC intervention programmes due to additional inputs and labour. Plus there is increased probability that farmers will use agro-chemicals while participating in a non-organic banana agribusiness development programmes.

The exploration further incorporates discussions with scientists at the National Agricultural Research Organisation (NARO), National Agricultural Advisory (NAADS) extension agents, Non-government Organisations (NGOs) agriculture specialists and a private company, all stakeholders in some way of the banana TC schemes.

The analysis of the study is rooted in ecofeminist and disability studies theory. By drawing out these connections and intricacies, it offers a rationale as to the foundation of a pervasive attitudinal bias clandestine in societies.

The findings implore adoption of authentic investigative methods to represent 'the lived experience' of the farmer. This examination discovers that researchers with disabilities possess the ability to establish extraordinarily inclusive settings in which the research takes place and this can generate significant and vivid responses from participants.

Breaking normalcy and establishing research relationships.

Enabling usually unheard voices, such as those of certain women farmers with disabilities was critical to the validity of the research, and this required an understanding of the socio cultural and politically gendered mechanisms that stop some people from speaking. These include forms of censorship, suppression, intimidation, marginalisation, trivialisation and other forms of discounting someone. Similarly, Davis (1995:1) argues that 'there is a strange and really unaccountable silence when the issue of disability is raised (or more to the point, never raised). The concept of disability...has been relegated to a sideshow, a freak-show'.

The research may alter the way people perceive the 'other' whether covert or overt as illustrated in Vignette 1, however it should not be an instrument of dominance and legitimating of power elites. As argued by Abbott (2007:1993), research processes are capable of challenging power relations which can be reversed.

This argument has influenced the study immensely reflecting the decision to import independent means of transport. An adapted 4x4 enabled notable flexibility to access people and places even in challenging conditions, and most exceptionally for a researcher with a physical disability³. The vehicle made it possible to be involved and useful in local life by

transporting people, goods and livestock regularly too⁴. The hierarchy of status created by research should not be ignored as this may create distrust of the participants and the data collected can reflect expected behaviour⁵.

Vignette 1: Interview with farmer in location L (2009). Excerpt from personal journal. Photograph, Ben Wise.



Conversing with the farmer on the farm exposed the complexity and relative qualities of gender relations and the ability of researchers and development practitioners to access those farmers with a 'quiet voice'. The male of the household is retired from government employment, and although his health was fragile (a stroke and infection due to accident with an axe), he regarded himself as the head agriculturist in the household (he worried about the ability for his wife to cope when he dies). However, as we discussed banana cultivation, he did not know the varieties of musa cultivated on the 10 hectare farm. He called his wife from inside the home and she sat nearby with the children. The woman farmer answered all the questions pertaining to banana cultivation, except those concerning the creation of the TC banana plantation, although she supplied subsequent care. This experience illustrated the gendered activity of banana cultivation: as the perception of possible income generation increases, the cultivation of improved cultivars maybe 'hijacked' by male farmers

despite being woman only development programmes. Subsequently, through further communication, completion of a 'timeline' and a photodiary, the gendered activities and attitudes are disclosed.

I joked with the male farmer that banana growing really was a gendered endeavour, and he laughed too and agreed. 'I wanted to join the women's group, but I got hit on my foot by an axe, my body system got infected. I get drowsy and sometimes faint. I can't commit myself to something I can't complete. My wife would have joined but she is just too busy with the children.' Weeks later I heard the news he had joined the Women's Group in the village (really active, motivated and allows men to join but not hold positions of power), from which he had been previously refused. This reminded me that research can disrupt local norms. When quizzed as to my professionalism and disability he replied, 'I feel surprised talking to a disabled researcher, but I am encouraged by the fact you are here. It gives me hope. Here we call disabled people 'those with a little damage'.

To return to Mies et al's. (1993) argument, the rupture in the normalcy of women's and men's lives can happen when the extent of oppression is realised. A fissure in normalcy may cause the individual to confront real social relationships in which they had unconsciously been absorbed. In my research, as illustrated in Vignette 1, the woman of the household hovering in the background with the children and answers the questions regarding banana cultivation on behalf of the husband consulted in the study. This circumstance throws light on the gendered norms of subsistence and income generating banana growing within the culture, and exposes the complex intersections of gender, race and disability encountered during the study. Vignettes 1 and 3 exemplify the interwoven incidences and dilemmas uncovered that are within and beyond the research boundary of the semi-structured questionnaire.

After or in between interviews, over a cup of *mujaja* tea we deliberated the differences and commonalities of womanhood. Often discussion would turn to my relationship with my partner, as he supports my 'wheelchair-unfriendly' endeavours and provides care in absence of personal assistants. With convivial humour and warmth, we would compare and consider relationship situations, actions of our loved ones, thereby exposing cultural gendered norms which gave us all food for thought.

Perhaps, as a woman researcher using a wheelchair, I disrupted the normalcy of researchers perceived by the farmers consulted during the study. Many informal discussions and 'gossip' evolved around gender relations, culture and disability, caring for others, health, and so on, if not for my disability, these may never have occurred (as demonstrated in the discussions on healthcare and experience of spinal cord injury featured in Vignettes 2 and 3). In turn, relationships, particularly with the older women encountered during the study has undoubtedly altered my own perception and understanding of others profoundly.

There seemed to be an atmosphere of mutual ‘comprehension’, where I was regarded as a subject of oppression in my own culture due to my disability, and in their case, due to western interpretations of ‘poverty’, capitalism, patriarchy and so on. Thus, there was some kind of shared bond. More than that, there was an unspoken sense of shared appreciation of surviving and even succeeding regardless of the difficulties and challenges encountered (imposed upon) in life. Thus, the personal tragedy theory proposed by Oliver (1996) may be extended to refer to beyond just the ‘tragic’ person with disability, but also to all those living under discriminating socio-political and cultural values, and who survive and occasionally thrive.

Abbott (2007) in ‘doing incorrect research’, endorses the idea that knowledge is acquired in unusual and ‘off the cuff’ moments. This reminded me that the informal gossiping was hugely edifying and enjoyable at times, harrowing at others, which should not be trivialised. Farmers, perhaps felt I had an awareness of their oppression and frustration. Changing individual and social processes can enable understanding.

In support of this argument, Mies et al. in *Ecofeminism* (1993) warn academics that without one foot in the realm of practical, political action are isolated and suggest how:

They will have to give up the elitist narrow mindedness, abstract thinking, political and ethical impotence and arrogance of the established academician. They must learn that scientific work and a scientific outlook is not the privilege of professional scientists, but that the creativity of science depends on it being rooted in living social processes. Methodologically this implies the search for techniques with which to document and analyse historical processes of change.’ is necessary’ (38).

Vignette 2: Excerpts from personal journal (2008-2009)

*M*** talked of a son now living in Canada, she is the auntie and cares just as deeply about the welfare of all the extended family. Their son ‘had a blood clot near his heart, he had an operation when he got to Canada and survived. He would have died if he had stayed here, we do not have the treatments like developed countries’. Then I explained that I had escaped mortality twice not by the actions of special medical treatment or medical practitioners. Ordinary people knowing basic first aid and general resuscitation procedures, such as clearing airways saved my life. I describe there is some public awareness as to what to do in an emergency in the UK, as fictional soap operas on television and radio that are based in hospitals can help educate. She thought that it was good when there is a bus crash as there are many road accidents in Uganda (2008). Conversations exposed the use of plants on the homestead and local environment as a ‘first aid kit’, with one particular woman farmer revealing that she possessed acute medicinal herbal knowledge and*

successfully treated many people. The interview questions around health brought to light that a number of the older women had only received 'traditional indigenous' plant/earth/animal/water based medical treatments throughout their lives.

*Another incident moved me deeply and took me by surprise. An acquaintance D**** was knocked over by a bus while waiting at the stop to go to University in Kampala. He suffered a spinal cord injury causing paralysis and fortunately his mother had the funds to fly him to South Africa to receive specialist care in a dedicated spinal unit. This is something I am familiar with as 21 years ago I injured my spinal cord whilst working in Guatemala resulting in paralysis. Fortunately I received good treatment in the capital city until I was fit enough to return to the UK.*

I spent 6 months rehabilitating in a National Health Service spinal unit to life using a wheelchair including continence management education and this required drawing upon huge reservoir of medical as well as social care expertise. I immersed in the vital daily activities yet struggled with some institutional attitudes influenced by a medical model perspective and was discharged as soon as able.

Combined with other grievances I was admonished for a preference to administer alternative therapies along with other patients, rather than following the medical convention at the time of prescribing Benzodiazepines for hypnotic drug therapy and anti-spasticity agents. At the age of 24 I refused to go to bed until I was ready as supportive friends and family encouraged me to go out in the evenings rather than fit in with nursing staff regimes on the ward which demanded most patients to be in bed by 9pm.

*D**** returned from South Africa after 1 month of spinal cord injury treatment, cut short by financial limits. Just as I had worn a neck brace 2 years post injury, D**** was wearing a solid plastic back brace used to protect and support broken vertebrae, and he was using a wheelchair and seemed in good general health at this stage in his rehabilitation. On his return to Uganda he visited a rural herbalist health practitioner rather than the state owned hospital in the capital. Whilst in the village, his back brace was packed with a mixture of plants, however he died a week later. How could I have helped? In the UK I am a member of the Spinal Injuries Association, and via a user-led organisation named The Back Up Trust, along with around 100 other volunteers living with spinal cord injury, I am a mentor to others affected by spinal cord injury.*

My experiences expose the complexity created by making use of a combination of innovative medical technology and indigenous herbal medicine. These intricate incidences may be disclosed in a 'lived experience' approach thereby advancing

awareness of the circumstance of people with disabilities and small-scale semi subsistence farmers.

Before returning to the UK at the end of the research trip I visited the spinal injury ward at the capital city state-run hospital and shared experiences with patients, relatives including nurses and doctors. It is unlikely I would have survived my injury had I been living in Uganda.

Other distressing and emotionally challenging circumstances arose frequently. On one occasion I halted an interview as I discovered the participant was in discomfort, she revealed it was due to, 'her uterus falling out'.

A participant took me to one side and asked me, 'if men in the UK used me like men in Uganda used her (because she was a person with a disability)'. After some discussion it transpired some men would come from the local village (her place was a little isolated) and she was subjected to sexual abuse. What could I do?

The adoption of three abandoned puppies requiring a constant regime of feeding, bathing and affection was both a grounding and rewarding experience. The care routines offered space for mindfulness and also eased the overwhelming sense of helplessness for me. At the end of a long day coming back to our home and caring for the dogs was a restorative ritual along with writing a journal every day.

A broad approach to power acknowledging that it affects everyone and every institution, and that no human relationship is exempt, is essential. However, knowledge has the potential to disrupt power relations in participatory action research (Chomsky, 2002: 224-280; Gramsci, 1988; Freire, 1970; Chambers, 1989) The idea is that through discourse those previously excluded from action, break the boundaries of possibility generating knowledge permitting the potential in us all (Bradbury and Reason, 2008).

Some refer to the monopoly of expert knowledge producers such as universities, being guardians of 'the expert' (Chambers, 1983: 1989). Robert Chambers (1989; 1995) stated that power is related to the positions people inhabit, rather than in the characteristics inherent in the person. People can occupy 'upper' and 'lower' positions in multiplicity depending on context and, 'normal professionalism' creates and produces power relations.

As Chomsky (2002: 233) observes:

Universities do not generate nearly enough funds to support themselves from tuition money alone; they are parasitic institutions that need to be supported from the outside,

and that means they are dependent on wealthy alumni, corporations, and on the government, which are groups with the same basic interests. Well, as long as those universities serve those interests, they'll be funded.

The proposition is that organisations such as the Rockefeller Foundation finance many universities and research agendas pertaining to agricultural research and development programs on a global scale (Vellema et al., 2004). Study respondents are participating in Rockefeller Foundation (amongst other international organisations) supported TC banana programmes. This investigation identifies the influence of transnational organisations and the power they wield over government agricultural research programmes.

Combining particulars of PAR, ecofeminist methods of inquiry and a disability studies stance creates a powerful platform for socio-political motivation for change. The triumvirate of ideology and practice reject hypothetic knowledge not grounded in everyday life and in unison they encourage us all to be researchers within our lived experiences or environments and, if unhappy, take action for transformation.

Dissecting disability studies discourse: How do I fit in?

Research may embody the prejudices of society towards people with disabilities, potentially replicating hegemonic notions of normalcy. Could I, as a disabled researcher break this 'normative hegemony' which disrupts people's prejudices and asymmetrical structures of the norm?

Differing disabilities are valued inconsistently and this is connected to the influence of complicated socio-political forces (Swain et al., 2003). For some, disability is positioned within the ability to produce in an industrialised society, where differing impairments are more disabling than others; and these notions dominate the global structural (the UN and the WB) perspectives of disability. Vignette 3 illuminates some replies to a question in the semi-structured questionnaire relating feelings when talking to a researcher with a disability. The interpreter translates the rejoinders as accurately as possible and mostly posed the query while I was occupied elsewhere.

Vignette 3: Farmer comments when asked how they feel about talking to a researcher with a disability (2008-2009).

I feel sad that she is in a wheelchair, I would like to take her home to the house to look after her, but I can see she has a good mind, I do not mind talking to her or her family, I can see she gets good help.

I feel really good (talking to you)... I wanted to help when you were getting out of the motor car. When I see someone disabled working, I get more motivated to work.

It is the first time to see a disabled 'muzungu' (Caucasian person).

I feel bad seeing her disabled, travelling a long way and doing lots of work. If she was able she would be able to do so much more.

I don't have any problem we are all equal. It doesn't surprise me, there are many disabled people in this country.

I would prefer it if you could walk, but I can walk and talk with you. My brother uses a wheelchair, he was paralysed with polio. But he works and has a wife. His first wife was disabled too, they had 2 children then she died. He has another wife. He is involved in local government.

It does not treat me well and I would like you to walk, I admire the fact that you are educated and given the chance that other disabled people could get educated..... I admire the fact that you work and it is good for other people to see. Just to learn and accept and treat as others. I had a disabled sister who got pregnant during the war and I couldn't take her to hospital.....and both died.

*I am very happy to see you, and have no problem with B** helping you. I am really happy that you have come back. It is a big challenge for me to see you live here because it is hard for someone who can move let alone someone like you.*

Helps to learn disability is not restrictive, you can still learn. All people can achieve I have a disabled daughter, she is 18 going to school. At first I thought it couldn't be successful, she did not feel comfortable and accepted at school. I had to sit her down and tell her the importance of schooling.

I don't feel so good, I feel very uncomfortable as my child became lame, he uses a stick and lost his job as a teacher.

You are good, you value and respect us, you mind and care about us and listen, you come all this way yet you are disabled, and we are able to walk.

I feel sad when I am talking to her and feel pity because she does lots of work and it is hard for her.

I respect seeing someone in a wheelchair here it impresses and motivates me maybe things might improve for me and my child with a disability.

I speak to you but inside my heart I think god is not fair. I think you should be able.

A number of farmers could see the environment was physically challenging for me to function using my wheelchair even with a mountain bike trike style attachment, I jerked and jarred my way through rutted banana plantations. However, one women farmer commented, *'but look how she can hold a pen and write... I cannot'*. Farmers could see I had a useful function of being able to write. With my physical abilities it is a great strain for me to farm without thoughtful design, human assistance and some assistive technology, as discussed in Vignette 2. It is unlikely I would be alive as the level of technology and knowledge to keep me healthy is not accessible for the majority of people living in rural Uganda. This makes me feel guilty, conscious of a little providence in this case and prompted appreciation of the struggles of disability rights activists who have demanded support for those with disabilities in the UK (Oliver et al., 2012).

Another incident whilst conducting research was thought provoking. At a visit to an organisation of disabled people, the secretary asked if she could try using my wheelchair as I transferred in to the 4x4. The women usually used flip-flops on her hands and knees, and got around on all four limbs. After unsteadily moving around the compound in my wheelchair, she decided she could do more, better and with greater speed without the wheelchair in this context. My first experiences of coming to terms with using a wheelchair were challenging and I could not utter the word 'wheelchair' for six months post spinal cord injury as the intense emotion invoked in doing it was overwhelming. But I soon discovered that my wheelchair is the most valued possession, and on occasion considered an extension of my body. Often development programmes impress a western (UK model of disability in the case of Uganda policy, aided by Oxfam) perspective of disability. Is it just to impose potentially inappropriate western assistive technology, biotechnological solutions and policy on disabled farmers in Uganda? Many times I wished my wheelchair could lower to ground level enabling me to eat sat on the mat with others around a communal banana leaf steaming with delicious food too. Often I felt a little isolated being the only person sat in a chair albeit with wheels.

All these real incidents made me question disability, culture, function, usefulness, commodification, impairment, and others, in a whole new light. Some people consulted in the study distinguished and identified I had a useful function quickly.

Vignette 3 reveals a selection of diverse attitudes around disability, as some farmers

recognised the extra effort it takes for a researcher with a disability and admired the tenacity it took for me to work in the environment. They also appreciated the collaborative support provided to enable the research to take place.

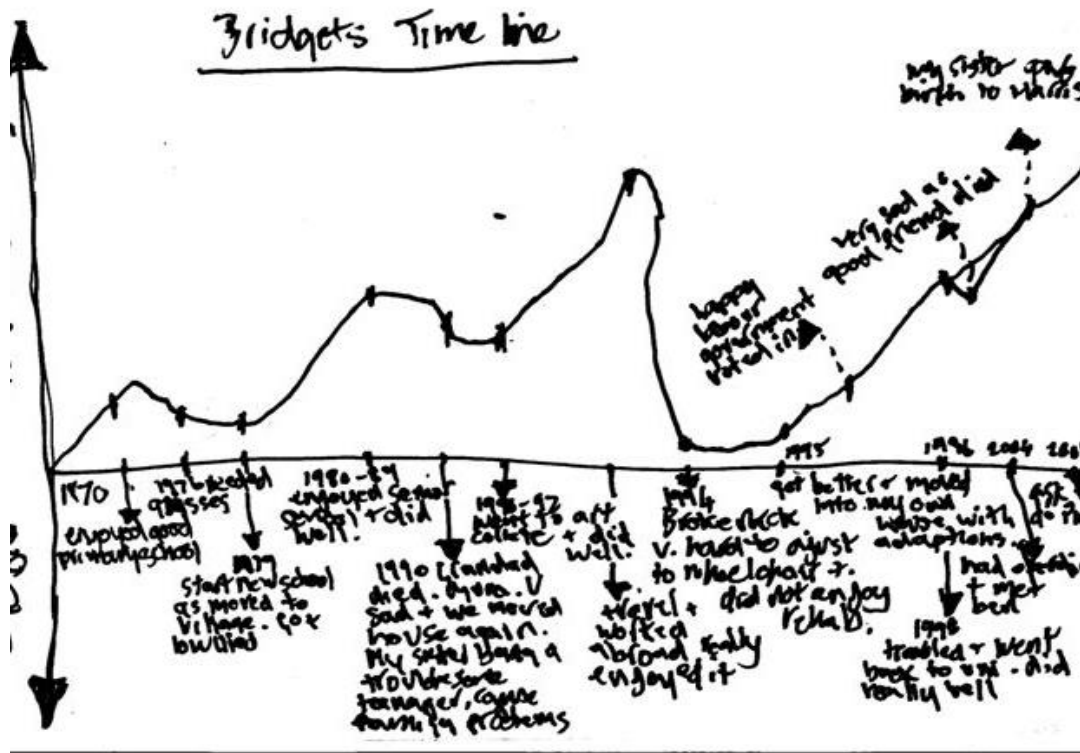
Many times deliberations turned to the livelihoods of disabled relatives, often a close family member, such as a child. Vignette 3 highlights how various people in the rural communities expressed a broader view of normalcy and thus were able to perceive function in a holistic way, not entirely associated with economic purpose. This creates a less discriminating environment, where some survival strategies of rural communities necessitate mutual cooperation and a use would be found for *'those a little broken'*, although this is not the same for all people with disabilities.

Recognition of the lived experience of disability, for me, provides some answers and solutions to the values and meaning of disability and impairment. Obtaining an impairment later in life involves accepting that something in your body operates differently irrespective of the discriminating socio-political context that can also inhibit and alter function as well as meaning for that person. The enormous challenge to transform and influence others' notions of 'disability' is not the responsibility of the disabled person alone.

Sharing experiences with farmers by means of timelines.

Hulme (2003: 2004) employed 'ranked timelines', where respondents created a timeline and rated their sense of well-being at defining experiences retrospectively on a scale rated 10 to -10. I felt such an approach could be adapted as a component of the study. In view of breaking down barriers and in an atmosphere of shared experience I represented my life story in a timeline and used it as an example as illustrated in Figure 1. Surprisingly, after listening to my blemished life story in which I referenced political, personal and a few societal changes, they agreed to draft a timeline defined entirely by their particular momentous events. The control of information was in the hands of the farmers. It appeared that issues of sexual and domestic violence, alcohol dependency, including the mortality and morbidity of children reoccurred in the timelines of the women. Aspects of gender relations, unethical and difficult to broach in an 'interview' situation, were raised by the process of creating the timeline. Feedback after drafting timelines included comments such as, *'I did not realise I had done so much in my life'*.

Figure 1: Photocopy of my laminated timeline disclosed to farmers willing to share their life history on their terms.



A number of women declared no one had ever asked about their lives, just someone showing an interest in the details of their livelihoods ‘made us feel better’. Although distressing to read at times, timelines on the whole, were a rewarding exercise for all participating.

Life world methodology for the semi- structured questionnaire.

Hodge (2008) encourages using life world as a way of giving voice to participants’ experiences, using examples from a study with parents, whose young people were in the process of being labelled as ‘on the autistic spectrum’. Hodge articulates how ‘life world is an existential phenomenological methodology concerned with human experience and the meanings people attach to what happens to them’ (2008:2). This suggests the validity of the research is evidenced in the individuality of experience and emphasis is upon the meanings constructed by the participant. Therefore, it is the intention to place the individual experience onto paper as accurately as possible using person centred counselling practice.

The questionnaire is coded and divided into a number of categories broadly embracing

aspects of livelihood or lived experience of the agriculturalists. This is illustrated in Table 1. Life world methods authorises the approximate unpicking or ‘fractionalising’ of interconnected aspects of lived experience.

Economic aspects	Remittance, other income generation activities, household circumstance.
Physical environment	Living conditions, the natural environment, water, soils and climate, other crops cultivated.
Banana growing	Land size for bananas, varieties grown, food culture and cultivation techniques.
Human and cultural sphere	Membership in groups, religious affiliations, family relations/situation, ethnicity, mobility, psychological aspects, access to knowledge, governance, health.

Table 1: The division of the huge volume of information to enable analysis.

I had memorised the questionnaire, as sometimes it seemed more appropriate to follow the topic of the conversation with the farmer, rather than question order. Questions were not posed to study participants as exemplified in the questionnaire. For example questions numbered H94 *How often do you eat meat?* and H95 *How often do you use oil in cooking?* are integrated into a conversation in which we shared details about favourite food to eat. There was regularly much humour as I declare not eating meat by choice for nearly 30 years and subjecting friends and relatives to the same diet. As demonstrated in Vignettes 2 and 3, answers to challenging questions were frequently embedded in a discussion in which I shared aspects of my life in the UK, particularly elements of livelihood. Perhaps being grounded in shared experience ethically, sensitive subjects are discussed with greater freedom from judgement. This ‘shared environment’ created frank and transparent discussions which generated congruent responses to difficult and apparently uncomfortable inquiry.

Although the semi structured questionnaire generated relevant and significant knowledge, other more ephemeral aspects of the lived experience were absent. The photo diaries allowed farmers to express themselves without following my research agenda.

Photography as a tool for research.

For some participants, photography turned out to be an expressive and accessible visual tool providing an outlet for capturing the astute perceptions of farmers. Giving specific people a digital camera enabled participants to document issues that affect them. For this cohort, it proved to be a participatory method that assisted these respondents to learn a new skill and be in control of the issues highlighted by their own photographs.

Three farmers volunteered to take charge of a camera for two months and make a pictorial banana-livelihoods diary. The broader issues around the banana are not to be excluded as these are sometimes the most interesting and overlooked. We visited farmers every couple of weeks, took extra laptop batteries and scrolled through pictures reflecting on their content. An example is illustrated in Vignette 4 as a farmer describes his family eating banana on mats located just outside his house where cooking and washing often takes place. It was disclosed that the farmer took the photograph on the 25th December 2008 and he expressed his feelings of delight that his family were present and able to farm. Sometimes visual communication can move the research beyond oral interviews to uncover unexpected, or enable the unexpressed to be expressed. The perspectives of the respondents can be very powerful in a visual form.

Photography used as a research tool has the potential to transcend linguistic barriers, such as those of translating meanings of words that may not exist in differing cultures. Although the researcher is mediating the content and meaning of the photographs, the research process is directly led by the participants, however a number of people are excluded from the visual process. Reflexivity of the researcher is essential to the process, and constant awareness of power relations, assumptions and values gives room for participants to control and shape the process themselves.

Vignette 4: Farmers' Photodiary (2008)

A photo after farming earlier (with kitchen and washing in the background), this is my family going for lunch, there are even others outside the picture. I chose to photograph the different things that happen by my house, how we eat matooke (cooked banana) together on the ground, all around on mats. Matooke is very important, when you eat it, you feel full, you sweat, and feel contented.

My wife cooks but with the help of the grandchildren who collect firewood and water. We eat food I have grown, I never buy food, sugar cane and fruits all come from the garden. On the other side of the compound, the others are preparing to make

pancakes (made from fhia banana cultivar).

We get some money from them, we sell them at the shop on the main road, we shape on the table and fry on the fire, the young ones are really there to eat! I have about 30 grandchildren come for Christmas! Some live with me permanently; others come back in the holidays. I have some bigger grandchildren and they all help, especially older ones, they know how to farm, harvest, plant and dig. I hope people will see that I am doing hard work. I have worked hard and relied on my own energy. It is hard to have a big family; we must agree and work hard together. I appreciate my wife very much as women like her are hard to find, all the older ones take food home, I farm beans and they are very happy. They (the children) have been leaving, they live in the city but they still come to farm, we don't buy labour but they come to farm over 10 acres, the older ones are all good farmers, their mother taught them how to weave and know everything about the home. I have not been left well, I have been walking with sticks, not much energy to do farming. I have been trying to make trenches on banana plantation.



Many of the participants did not speak English, and Luganda was the most prevalent language. I was not fluent enough even though I had Luganda lessons for six months. With strong cultural norms and values, the Buganda context is very far removed from my life world. We discussed the aims, objectives and further implications of the research plus the requirement of informed consent with potential study participants in great detail.

Instead of using standard protocol of producing a printed copy of a letter for the farmers to

sign, after much communal discussion, the farmer would 'place their mark' on the reverse of two photo portraits of their choice.

The bond of disability studies and ecofeminism.

There are a number of comparable aspects to be drawn from ecofeminist and disabilities studies discourse in the rejection of eugenics. These include: an awareness of the commodification by others more powerful, for a few there is a desire not to exploit the natural environment, including the genome, expand normalcy and acceptance of diversity. Both movements acknowledge the authenticity of the lived experience of all people, and especially those with disabilities. Equally both are movements born of activists and activism and demand an alternative view of some Darwinian concepts and outdated ideas of Thomas Malthus. Vignettes 5 and 6 highlight the connection of ecofeminism and disability studies discourse as a framework for the research.

In current times organisations such as The Royal Society and The Rockefeller Foundation are involved in manipulating the genome, whether plant or human. The ecofeminist dialectic draws many criticisms of the activities of these global institutions (Shiva, 1999). Often, the cultivation methods of small-scale subsistence farmers in the global South are perceived as insufficient compared to novel biotechnologies developed by scientists in using the technology formed in the global North. Farmers reported inadequate information dissemination from the NARO and cited the radio, family and other farming group members where they acquired the greatest amount of farming knowledge. Only two respondents knew of TC technology processes yet the farmers are exceptionally knowledgeable and often requested increased 'cutting edge' agricultural information during the research (my books). The most common technology use on the farms in the study included a hoe and knife, although some participants visited internet cafes to use computers to contact relatives overseas. This study adopts a broad perspective accepting the complexity that globalisation as well as colonialism creates, and the research challenges over-simplified dualisms of geographic notions of global South/North, ancient farming techniques/scientific laboratory-based biotechnology, or impairment/disability as frequently they do not reflect the authentic intricacy of the genuine lived experience.

The Rockefeller foundation is one linking transnational institution involved in earlier eugenic movement in the nineteenth century and the control of plant biotechnology today (Vellema et al., 2004; Leadbeater. 2011). Shiva and Moser (1995) assert that organisations with this type of history and association contribute to the loss of sovereignty of local peoples over their biodiversity in the environment on which they survive. This issue was illustrated by a number of semi-subsistence farmers growing TC banana plants participating in the research.



Figure 2 above is a diagram illustrating the mind map of the theoretical framework including a researcher with a disability, farmers participating in the study and the physical environment on which farming depends. It demonstrates the relationship of ecofeminist and disability studies dialogues as a rejection of the Eugenics movement.

Agriculture programs delivered by the state and NGOs, as well as farmers, purchase TC banana plants from agricultural outlets such as AGT Laboratories that are supported by the Rockefeller Foundation, amongst other international organisations. The farmer is commodified by pressure to purchase additional inputs from the agricultural outlets every growing season and encouraged into mono-cropping or intensive cultivation of one crop variety. Sovereignty of the semi-subsistence farmer of banana biodiversity is reduced due to the potential reliance upon a limited amount of cultivars by participating in agricultural development programs supported by such institutions (Leadbeater, 2011).

It could be suggested that people with disabilities are commodified through the necessity for rehabilitation goods and services in the global North. For instance, the cost to purchase my manual wheelchair was comparable to that of my car which requires far greater inputs to produce. Perhaps disabled people themselves are a ‘raw material’ in the capitalistic and commodifying process. For instance, a ‘disabled’ industry provides employment for many

able-bodied people, yet this is not often available to the disabled people themselves. This implies, by necessity, that people with impairments require assistive technology to overcome the disabling environment, but nevertheless still face discrimination. The disabled person is forced into purchasing aids, and sometimes the technology is not demand driven by them, but by others more powerful in society. A number of disabled activists believe the responsibility for supplying low cost appropriate assistive technology should be in the hands of the state.

Others, like Ratzka (2010) proposes the opposing view that the freedom of the market facilitates disabled people access to affordable goods and services:

In many countries goods and services for disabled people are still provided by public or quasi-public monopolies where consumers have very little say in the matter. He argues... 'Cash benefits open the way to demand-driven markets where suppliers listen to what consumers want. Services in kind are characteristic for supply-driven markets where you get what's on the shelf...

As the research journey took me to rural villages, I met other people with disabilities, but my heart sank at the thought of the technology, inputs, and the budget necessary to enable particular disabled rural Ugandan people to be more included in their communities. How could the neoliberal approach, as desired by Ratzka (2010), be successful in facilitating the livelihoods of small-scale farmers with disabilities, located in the isolated rural Ugandan villages? Is it a form of neocolonialism to impose potentially inappropriate and expensive assistive equipment on rural disabled people? Perhaps, appropriate and locally manufactured assistive technology, generated and controlled by people with disabilities themselves is the most fitting solution. Is the market as it exists now really the solution for increasing the inclusion of disabled people in society? (My favourite wheelchair is designed by an engineer with the same disability as myself).

Could the same parallels be made of the 'poverty' industry? 'Poor' people themselves are defined as 'poor' by others and often not by themselves. Perhaps subsistence small-scale farmers encountered during the research are a raw commodity in a biotechnological industry of professionals, NGOs and International bodies created to solve the problem of income deficit semi-subsistence farmer, and in this case, their un-industrialised methods of food production. Perhaps eugenics influenced socio-political constructs fuelled by capitalism and colonialism are imposed upon people from differing geographies as demonstrated in the vignettes above. Comparisons may be drawn to the situation of people with disabilities as depicted earlier and in Figure 3 below.

Conclusion

Novel and participatory research practices adopted, encapsulate the complicated realities and include those usually excluded by research in practice, such as farmers with disabilities and researchers with disabilities, as this aids the creation of pragmatic and congruent research results.

As a disabled researcher I disrupted the normative hegemony, and that may contribute to the facilitation of unique responses from farmers. As illustrated in Vignettes 2 and 3, there are connections that bind the researched to the researcher in this study and a relationship was formed by the shared sense of survival spirit. The socio political structures do not seem to advocate the livelihoods of a person with a disability, or those of some small-scale farmers encountered in the research. The imposed eugenics doctrine of the nineteenth century is responsible, in part, for the discrimination felt by people with disabilities, the inequality experienced by small-scale rural farmers, and the injustice dealt to nature. This is demonstrated in the Figure below. This maps out the pyramid of ecofeminist and disability studies perspectives of broad neo-liberal economics acknowledging the huge amount of invisible functions; activities or work that occur outside the formal economy, and informal economy. Disability studies consciousness implores all people to delve into, and expand perceptions of ability/disability, invisibility of functionality, value and worth of human activities in wider society. Furthermore, an ecofeminist viewpoint may authenticate the connectivity of diverse activities performed by all living organisms and re-examine their worth beyond the minimised, eugenics infused neo-liberal, monetarised capital-intensive market exchange economic perspective.

The similarities of ecofeminist and disability discourse are not consequential, and Figures 2 and 3 illustrate the relationship and connection which bind and frame the research process. Optimistic notions may be observed, that through shared experience of exploitation, a sense of solidarity and community is created, hence incorporating diverse and unexpected people-other living organisms. The intersections of race, gender and disability are brought to the fore by the unique survey environment, in part shaped by the researcher with a disability. Acknowledgement of commonalities such as ‘a shared invisibility’, the dissatisfaction of some services delivered by the state and government, enhanced the autonomy and agency of change among some study participants.

Encouraging farmers to complete reciprocal timelines unravelled their life histories, revealing the experiences encountered over time allowing them to reflect and evaluate their livelihoods. The photo diaries facilitated comprehensive narratives loosely, encompassing banana cultivation and the livelihood of the photographers. The pleasurable element of the participants in actively mastering and understanding the research techniques dispelled some hierarchy, thus promoting the disclosure of knowledge. My disability served to break down

some negative aspects associated with methods of research conducted in the past and inspired a perhaps unique participatory research process.

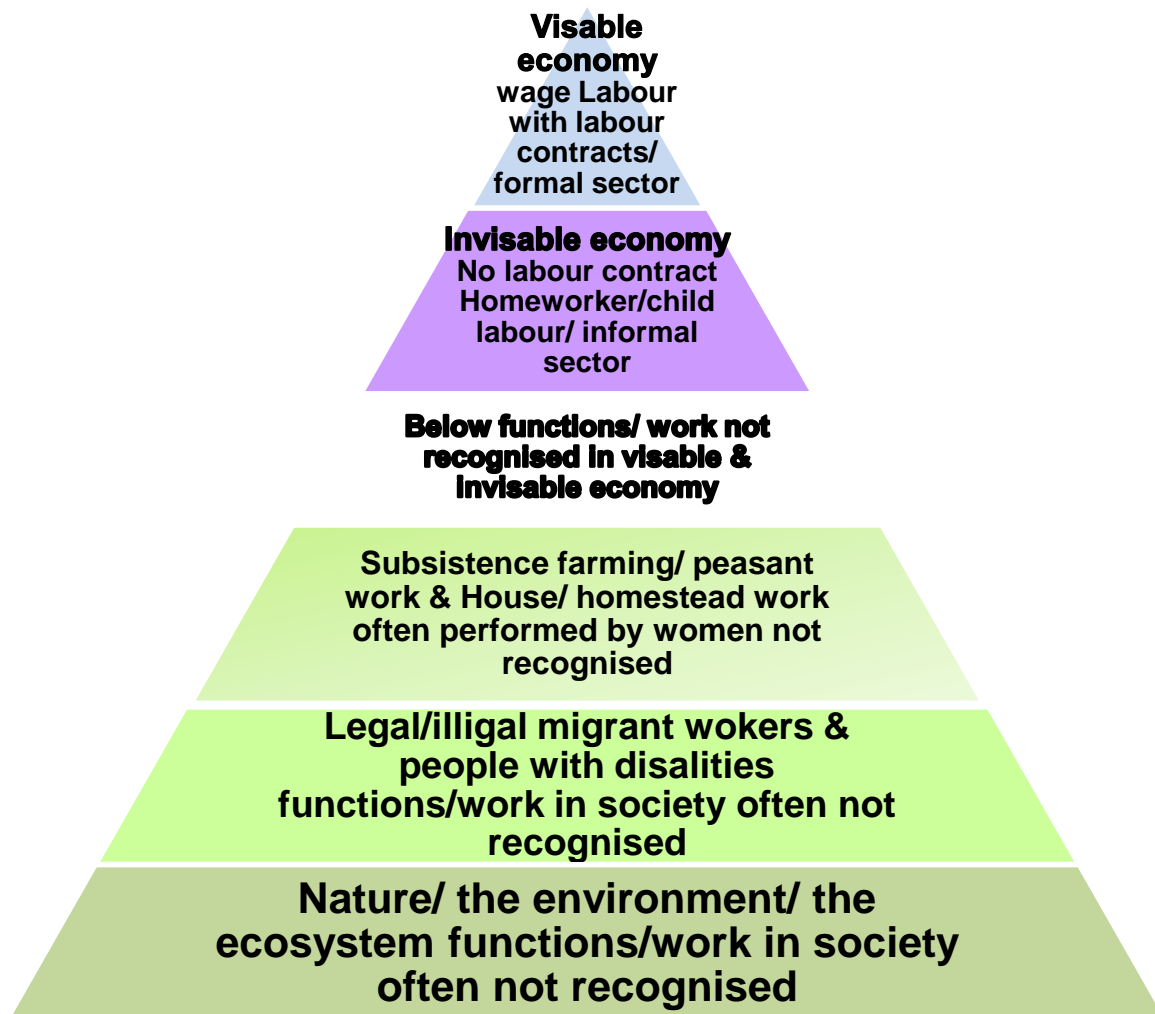


Figure 3: A pyramid shaped diagram illustrating an Ecofeminist and a Disability studies influenced perspective of Neo-liberal, eugenics imbued economics (Bennholdt-Thomsen et. al., 1999: 31; Davies, 2002: Leadbeater, 2011)

Acknowledgements

This extraordinary investigation was made possible by the expertise, assistance and kindness of Ben Wise as well as personal assistants, family, friends, farmers, scientists, academics and development practitioners.

Notes

¹ Consultation with farmers who had completed the Ugandan household poverty survey revealed the farmers recollection of Idi Amin using the 'research bureau' as a cover for the brutalisation and oppression of the people of Uganda.

² As a disabled woman, under a Eugenics ideology my ultimate fate would have been enforced sterilisation!

³ Farmers would often help me into the car and assist in dismantling and packing my wheelchair into the 4x4.

⁴ In previous development work in Guatemala many NGOs discouraged transporting local people.

⁵ In the study some farmers had fear and suspicion of research connected with the government. One farmer still believed I was from the government even after a lot of discussion.

References

Abbott, D. (2007). Doing 'Incorrect' Research: The Importance of the Subjective and the Personal in Researching Poverty. In A. Thomas and G. Mohan (eds.), *Research Skills for Policy and Development* (pp. 208-228). UK: Sage.

Backup Trust, The. [online]. Available at <http://www.backuptrust.org.uk/home>.

Bennholdt-Thomsen, V. and Mies, M. (1999). *The Subsistence Perspective; Beyond the globalised economy*. UK: Zed.

Bradbury, H. and Reason, P. (2006). *Handbook of Action research*. UK: Sage.

Chambers, R. (1983). *Rural development; putting the last first*. UK: Intermediate technology.

Chambers, R. (1989). *Farmer first: farmer innovation and agricultural research*. UK: Intermediate Technology Publications.

Chambers, R. (1997). *Who's reality counts? : putting the last first*. UK: Intermediate technology.

Chambers, R. (2002). *Participatory workshops; a sourcebook of 21sets of idea and activities*. UK: Earthscan.

Chambers, R. (2005). *Ideas for development*. UK: Earthscan.

- Chomsky, N. (2003). *Understanding Power: The indispensable Chomsky*. US: Vintage.
- Chronic Poverty Research Centre (2008-09). *The Chronic Poverty Report. Escaping poverty traps*. UK: Chronic Poverty Research Centre, Manchester.
- Darwin, C. (1859). *The Origin of Species by Means of Natural Selection, or the Preservation of Favoured Races in the Struggle for Life*. UK: John Murry.
- Davis, L. J. (2002). *Bending over backwards: Disability, Dismodernism and other difficult positions*. US: New York University Press.
- Davis, L. J. (1995). *Enforcing normalcy: Disability, Deafness and the body*. US: Verso Books.
- FAO (2012). FAOSTAT. [Online] Available at: <http://faostat.fao.org/site/339/default.aspx>
- Freire, P. (1970). *Pedagogy of the Oppressed*. New York: Seabury Press.
- Freire, P. (1998). *Pedagogy of freedom: ethics, democracy and civic courage*. Oxford: Rowman & Littlefield Publishers.
- Goodley, D. (2011). *Disability Studies: An interdisciplinary Introduction*. UK: Sage.
- Gramsci, A. (1988) in Forgacs, D (ed.). *A reader: selected writings 1916-1935*. London: Lawrence and Wishart.
- Haraway, D. and Gane, N. (2006). When we have never been human, what is to be done? *Theory, Culture and Society*, 23(7/8), 135–158.
- Hodge, N. (2008). Evaluating Lifeworld as an emancipatory methodology. *Disability & Society*, 23(1), 29-40.
- Hulme, D. (2004). Thinking ‘Small’ and the Understanding of Poverty: Maymana and Mofizul’s Story. *Journal of Human Development*, 5(2), 159-194.
- Hulme, D. and Shepherd, A. (2003). Conceptualizing Chronic Poverty. *World Development*, 31(3), 403-423.
- INIBAP. (2005). INIBAP annual report 2004. International Network for the Improvement of Banana and Plantain, Montpellier, France. [Online] Available at: www.inibap.org/pdf/2004ra_en.pdf
- Kindon, S. Kesby, M. and Pain, R.. (2007) *Participatory Action Research, Approaches and Methods: Connecting people, participation and place*. London: Routledge.
- Kristof, N. D. (2003). *The New Eugenics*. New York Times July 4th, 2003. [Online]. Available at: <http://www.geneticsandsociety.org/article.php?id=150>.

- Leadbeater, B. (2011). An assessment into the effectiveness of banana TC intervention schemes at improving the livelihoods of small-scale agriculturists, particularly for women producing banana in the Lake Victoria region of Uganda. Phd Thesis.
- Malthus, T (1914). *An essay on the principle of population.(1766-1834)*. UK: Dent Publications.
- Mies, M. and Shiva, V. (1993). *Ecofeminism*. UK: Zed.
- Mikkelsen, B. (2005). *Methods for development work and research: a new guide for practitioners*. London: Sage.
- Oliver, M. (1990). *The politics of disablement*. London: Palgrave Macmillan.
- Oliver, M. and Barnes, C. (2012). *The New Politics of Disablement*. UK: Palgrave Macmillan.
- Ratzka, A. (2010) Beyond the Social Model of Disability: An emphasis on disabled peoples' status as citizens and consumers is needed for self-determination and full participation. Keynote presentation, Disability studies conference, Lancaster University. [Online] Available at: http://www.lancs.ac.uk/fass/events/disabilityconference_archive/2010/keynote.htm.
- Shiva, V. (1999). *Stolen harvest: The hijacking of the World food supply*. UK: Southend Press.
- Shiva, V. and Moser, I. (1995). *Biopolitics: A feminist and ecological reader in biotechnology*. UK: Zed
- Spinal Injuries Association [online]: <http://www.spinal.co.uk/>.
- Swain, J., French, S. and Cameron, C. (2003). *Controversial issues in a disabling society*. UK: Open University Press.
- Vellema, S. and Jansen, K. (2004). *Agribusiness and society*. UK: Zed
-