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WOMEN'S INCOME-GENERATING ACTIVITIES IN A DISADVANTAGED FARMING COMMUNITY: TOWARDS SUSTAINABILITY

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(B.HONOURS IN CONSUMER SCIENCES)

Dissertation submitted as partial fulfilment of the requirements for the Masters degree in Consumer Sciences at the North-West University

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Potchefstroom
2006

ACKNOWLEDGEMENTS

God carried me through. It was by the grace of the Lord that I had the endurance, love, patience and positive attitude to train the women of the "Holding Hands" group.

I wish to convey a special word of thanks to the following people who made this research possible:

- My husband, Dewald van Niekerk, for his patience and understanding, his assistance with making sense of it all and for simply being there.

- Dr. Annamarie Kruger, my study leader, for the motivation to continue with the project when motivation levels were low.

- Mrs. Ment Larney, my co-study leader, who encouraged me to constantly think of new product ideas.

- In loving memory of Jane Serame, an original "Holding Hands" project member, for showing me yet again the real meaning of friendship.

- Dorcas, Welheminah, Dorah, Rebecca and Sarah, who positively inspired me and became true friends.

- This study was part of the larger Farm Labour And General Health programme (FLAGH), which is a multi-funded programme. The funds for this initiative were mainly provided by the Medical Research Council (MRC).

- The staff of the Ferdinand Postma Library for their assistance.

- Mrs. Mélanie Terblanche, for the language editing.

- Mrs. Carolien van Zyl, for her help and patience in finalising this dissertation.

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FEBDEV	Financial Economic and Business Development
FLAGH	Farm Labour And General Health
GDRC	Global Development Research Centre
GNP	Gross National Product
NGO	Non-Government Organisation
PAR	Participatory Action Research
SAAFECS	South African Association of Family Ecology and Consumer Sciences
JFECS	Journal for Family Ecology and Consumer Sciences
SWOT	Strengths, weaknesses, opportunities and threats
THUSA	Transition, Health and Urbanisation in South Africa
US	United States
WBS	Work Breakdown Structure
WCED	World Commission on Environment and Development

SUMMARY

Background

A multi-disciplinary study, referred to as the THUSA Project, (Transition, Health and Urbanisation in South Africa) was conducted in the North-West University between 1996 and 1999. This study identified farm dwellers in the North West Province as a particularly vulnerable group concerning nutrition as well as physical and mental health. During 2001-2002 a needs assessment was further conducted in two farming communities in the province and it was found that the workers and their families lacked in quality of life and were not able to generate an additional income. Based on the results of the THUSA study and the needs assessment, a threefold training and education intervention was implemented to educate female farm dwellers in basic resource management, repairing and recycling of worn textile items and manufacturing crafts from available items. The aim was income-generation. Results obtained from the threefold study indicated the need for additional, intensive training of women to enable them to generate an income by applying newly acquired skills. An additional training intervention, aimed at product development, was therefore designed. The intention was to enhance competency with regard to the possibilities that could be attached to the generation of an income from product sales. It was apparent that business and practical training would have to receive attention if quality products were to be produced. Twelve women participated in the training and formed the "Holding Hands" women's group.

Aim

The aim of this study was to investigate factors that would contribute to and enhance sustainable income-generating projects applicable to a farming community.

Specific objectives

The specific objectives of this study included the following:

- Identification of criteria from the literature that could be regarded as indicators of sustainability.

- Analysis of South African income-generating projects in order to determine factors contributing to sustainability (projects similar to and including the "Holding Hands" project).
- Identify and measure sustainability factors.
- Formulation of recommendations for sustainability indicators for income-generating projects similar to the "Holding Hands" project.

Methods

A literature survey was conducted to identify sustainability factors and gain information from various income-generating projects.

A qualitative research design was also followed to determine the factors that would contribute to the projection of sustainability. Information was obtained by making use of informal telephonic and face-to-face interviews with project facilitators.

To recommend sustainability indicators, a Participatory Action Research (PAR) approach was applied within the "Holding Hands" project.

Results

The steps in the PAR process included planning, acting, observing, reflecting and re-planning. Planning incorporated identifying the problems and needs of the community. It was found that female farm dwellers do not have access to markets, market requirements, trends and prices. Selecting a project management team was an imperative necessity to ensure ownership and cooperation of project team members. It was found that through the project management team, skills were transferred, knowledge shared and team members became motivated. In order to ensure that all team members would have a clear understanding of the project aims, a Work Breakdown Structure (WBS) was used as a logical planning instrument. It was found that project team members gained a better understanding of the tasks at hand by making use of the WBS. A further step in the PAR process involved a SWOT (strengths, weaknesses, opportunities and threats) analysis. The SWOT analysis assisted the project management team to focus on their strengths, reduce their weaknesses, exploit opportunities and manage the threats they are faced with. It was further found that through thorough financial planning, project team members

realised the importance of sound money management and that resources should be effectively allocated.

A further step of the PAR process that was applied to the "Holding Hands" project was that of acting. This process included data collection, categorisation of data into themes, and negotiation and establishing ownership. A pre-training skills test provided the researcher with valuable data, which assisted in product selection, matching skills levels and interests of project team members. Following the data collection phase, themes were identified and categorised. These themes included the need for business training, practical skills training, facilitator involvement, the need to generate a sustainable income, to ensure project sustainability and to identify indicators to measure levels of sustainability. Through negotiation and establishing ownership it was found that project members took charge of daily administrative tasks.

The observing phase allowed for the integration of monitoring and evaluation of participants as well as for the evaluation of the action plan. Reflecting allowed project team members to make sense of learning experiences and to engage in informal discussions, which in turn proved to increase their knowledge. The last step in the PAR process was re-planning. The re-planning phase took into account the outcomes of each of the steps in the PAR process in order to plan for future training.

Recommendations

The following main recommendations can be made for income-generating projects similar to the "Holding Hands" project:

- A participative approach must be followed, allowing the community to take ownership and responsibility for their own development.
- Sustainability indicators must be developed as a measuring tool, which will assist the community to monitor and evaluate their project progress, detect problems well in advance and take timely corrective measures.
- Facilitators of income-generating projects must be patient at all times and they must be willing to learn from community members and they should have an open mind.

- Checklists and evaluations are vital for both the facilitator and project members.
- Constant re-training of project members must occur in order to ensure continuity and sustainability.

OPSOMMING

Agtergrond

Die "Transition, Health and Urbanisation in South Africa" (THUSA) studie is tussen 1996 en 1999 deur die Noordwes-Universiteit onderneem. Die studie het plaasbewoners binne die Noordwes Provinsie as 'n spesifieke kwesbare groep in terme van voeding en fisiese en geestelike gesondheid geïdentifiseer. 'n Behoeftebepaling is in 2001-2002 binne twee plaasgemeenskappe in die provinsie onderneem. Daar is gevind dat werkers en hulle families 'n tekort aan lewenskwaliteit ervaar en dat hulle ook nie in staat was om addisionele inkomste te genereer nie. Na aanleiding van die bevinding van die THUSA studie, asook die behoeftebepaling, is 'n drievoudige opleiding- en onderrigintervensie geïmplementeer om sodoende vroulike plaasbewonders op te lei. Die opleiding het onder andere die volgende behels: basiese hulpbronbestuur, herstel en heraanwending van gebruikte tekstiel items en die vervaardiging van kunsprodukte ("crafts") vanaf beskikbare items. Die doel daarvan was inkomstegenerering. Bevindinge gegrond op die drievoudige studie het daarop gedui dat 'n behoefte vir addisionele, intensiewe opleiding van vroue bestaan. Die vroue sou 'n inkomste kon genereer deur van nuut-bekomde vaardighede gebruik te maak. 'n Addisionele opleidingsintervensie is ontwerp om produkontwikkeling te fasiliteer sodoende produkverkope moontlik te maak met die oog op inkomstegenerering, vanuit produk verkope. Dit was duidelik dat hierdie vroue besigheids- en praktiese opleiding benodig indien hulle 'n kwaliteit produk wou vervaardig. Twaalf vroue het aan die opleiding deelgeneem en het die "Holding Hands" vrouegroep gestig.

Doel

Die studie het ten doel gehad om die nodige bydraende faktore vir volhoubare inkomstegenererende projekte vir plaasgemeenskappe te ondersoek.

Spesifieke doelstellings

Die spesifieke doelstellings vir die studie het die volgende ingesluit:

- Om die kriteria wat as volhoubaarheidsindikatore beskou word, vanuit die literatuur te identifiseer.
- Om Suid-Afrikaanse inkomstegenererende projekte te identifiseer en sodoende die bydraende volhoubaarheidsfaktore te bepaal (projekte soortgelyk aan die "Holding Hands" projek).
- Identifiseer en meet volhoubaarheidsfaktore.
- Om aanbevelings en volhoubaarheidsindikatore vir inkomstegenererings-projekte soortgelyk aan die "Holding Hands" projek te verskaf.

Metodes

'n Literatuurstudie is onderneem om volhoubaarheidsfaktore te identifiseer en inligting van verskeie inkomstegenererings projekte te versamel.

'n Kwalitatiewe navorsingsontwerp is gevolg om bydraende volhoubaarheidsfaktore van projekte te bepaal. Dit is gedoen deur gebruik te maak van informele telefoniese en aangesig-tot-aangesig onderhoude met projekfasiliteerders.

'n Deelnemende aksie navorsingsontwerp (Participatory Action Research – PAR) is gevolg in die "Holding Hands" projek, om sodoende volhoubaarheidsfaktore aan te beveel.

Bevindinge

Die stappe in die "PAR"-proses het beplanning, aksie en implementering, observasie, nadenke en herbeplanning ingesluit. Identifisering van probleme en die behoeftes van die gemeenskap is in die beplanning geïnkorporeer. Daar is gevind dat vroulike plaasbewonders nie toegang tot markte, markbehoeftes, mark-tendense en markpryse het nie.

Dit was verder nodig om 'n projekbestuurspan te kies om sodoende eienaarskap en samewerking van projekspanlede te verseker. Daar is gevind dat die projekbestuurspan 'n groot bydrae gelewer het met die oordra van vaardighede, deel van kennis en motivering van spanlede. Logiese beplanning kon aandag geniet met behulp van 'n bestaande voorbeeldstruktuur waarvolgens werk in kleiner eenhede onderverdeel word (Work Breakdown Structure – WBS). Die "WBS" het verder

daartoe bygedra dat die projekspanlede die take wat verrig moet word, duidelik verstaan het. Die "PAR" proses het 'n "SWOT" (sterk punte, swakhede, geleenthede en bedreigings) analise ingesluit. Die "SWOT" analise het die spanlede gehelp om op hul sterk punte te fokus, hul swakhede te verminder, hul geleenthede uit te brei en die bedreigings waarmee hulle te doen het, te bestuur. Daar is ook gevind dat finansiële beplanning die projekspanlede kon help om die waarde van goeie geldbestuurpraktyke te besef en om noukeurig na die effektiewe aanwending van hulpbronne op te let.

'n Verdere stap in die "PAR" proses was aksie. Aksie, het data-insameling, kategorisering van data in verskeie temas, onderhandeling en vestiging van eienaarskap ingesluit. 'n Vooraf-vaardigheidstoetsing het die navorser voorsien van waardevolle data om besluite rakende seleksie van produkte, vaardigheidsvlakke en areas van belangstelling van projek spanlede te bepaal. Na die data-insamelingsfase is temas vir die data geïdentifiseer en gekategoriseer. Die temas het die nodigheid vir besigheidsopleiding, praktiese vaardigheidsopleiding en die betrokkenheid van die fasiliteerder aangedui. Dit het verder 'n behoefte om 'n volhoubare inkomste te genereer, projekvolhoubaarheid te verseker en indikatore daar te stel om vlakke van volhoubaarheid te meet, beklemtoon. Daar is gevind dat projekspanlede die verantwoordelikheid van administratiewe take op hulself geneem het deur eienaarskap te bewerkstellig.

Die observeringsfase het die monitering en evaluasie van deelnemers en die evaluasie van die aksieplan ingesluit. Die nadenkefase het die projekspanlede 'n geleentheid gebied om te reflekteer op hulle leerervaringe. Hulle het aan informele gesprekke deelgeneem om sodoende hulle vlak van kennis te verhoog. Die laaste stap in die "PAR"-proses was dié van herbeplanning. Die herbeplanningsfase het die uitkomste van elke stap in die "PAR"-proses in ag geneem, om sodoende vir die toekoms te kon beplan.

Aanbevelings

Die volgende hoof-aanbevelings kan gemaak word vir inkomste genereringsprojekte soortgelyk aan die "Holding Hands" projek:

- 'n Deelnemende benadering moet gevolg word om die gemeenskap 'n kans te gun om eienaarskap te neem vir die projek en verantwoordelikheid te aanvaar vir hul eie ontwikkeling.
- Volhoubaarheidsindikatore moet ontwikkel word as 'n meetinstrument om die gemeenskap te help om projekvordering te monitor en te evalueer. Hulle sal sodoende probleme vooraf kan opspoor en mettertyd oplos.
- Fasiliteerders van inkomste-genereringsprojekte moet ten alle tye geduldig wees en gewillig wees om van die gemeenskap te leer, en met 'n oopkop-benadering na die situasie te kyk.
- Kontrole lyste en evaluering is nodig vir beide die fasiliteerder en projekspanlede.
- Gereelde heropleiding van projekspanlede moet geskied om kontinuïteit en volhoubaardheid te verseker.

CHAPTER 1: BACKGROUND AND PROBLEM STATEMENT

1.1 BACKGROUND

The Transition, Health and Urbanisation in South Africa (THUSA) study was carried out between 1996 and 1999. This study identified farm dwellers in the North West Province as a particularly vulnerable group concerning deprived nutrition, and physical and mental health (Vorster *et al.*, 2000). An intensive needs assessment was conducted in 2001-2002 in two farming communities in the North West Province and it was found that the workers and their families lacked in quality of life. This was due to low-income levels and no additional opportunities to increase their income (Kruger & Stoker, 2004:4; Larney & Venter, 2002:1-2).

Research from the THUSA study (Vorster *et al.*, 2000) and other studies (Kruger *et al.*, 2006) further indicated that the primary education of the farm dwellers was extremely poor, contributing to poverty and limited job opportunities. The farm dwellers are hence challenged in many ways as a direct result of poor infrastructure, isolation, lack of health services, poor education and a lack of employment opportunities (Kruger *et al.*, 2006; Muller, 2002; South African Human Rights Commission, 2003).

Based on the results from the THUSA study, the FLAGH (Farm Labour And General Health) programme was initiated in 2001. After a thorough needs assessment on two farms in the Rysmierbult area of North West Province, a study was conducted to provide training and education to empower the female farm dwellers on these two farms. The FLAGH-programme is a multisectoral research and intervention programme, including a research team comprised of nutritionists, nurses, a theologist, consumer scientists, physiologists, psychologists, biokinetici, sport scientists and biochemists (Kruger & Stoker, 2004). The women were trained in family resource management, including budgeting and time management (Masetloa, 2004) and to recycle and repair old clothing items (Botha, 2005). The female farm dwellers were further taught to produce a number of arts and crafts directed at income-generation (Du Plessis, 2004). This was done to enhance their knowledge and skills, reduce poverty and increase human well-being. During the time of the resource-, recycling- and craft production training, the women indicated the need for future interventions and to receive training in order to be able to produce a

marketable product for income-generation (Masetloa, 2004; Botha, 2005; Du Plessis, 2004). These training initiatives and skills projects therefore provided the foundation for a much-needed follow-up intervention, which will be described in this dissertation.

1.2 ORIENTATION

According to Muller (2002), 900 000 farm workers are employed in South Africa and approximately 600 000 are permanent employees. Farm dwellers in South Africa account for in the region of six to seven million people (Muller, 2002). Approximately seven people are therefore dependent on one farm worker's salary, regardless of whether the employment is on a permanent or seasonal basis. Salaries for full-time workers range from R700 - R1200 per month, with added benefits such as free housing, water and subsidised electricity (Vorster *et al.,* 2000; Leuvennink, 2002; Kruger *et al.*, 2006).

Farming communities in general are isolated and therefore far removed from additional job opportunities. This was confirmed by the THUSA study and the needs assessment conducted within the two farming communities in the North West Province (Vorster *et al.,* 2000; Kruger *et al.,* 2006). These two communities live 50 kilometres from the nearest town and therefore no direct transport is available from the two farms to urban areas (Kruger *et al.,* 2006). The farm dwellers are able to travel directly via taxi to Potchefstroom only once a week, mostly on a Saturday. Transport to the major cities and towns is, therefore, a major stumbling block for the farming communities, who are not able to reach markets for selling products produced and to find and make use of job opportunities (Kruger *et al.,* 2006).

Low levels of education and lack of formal education among female farm dwellers further contribute to limited job opportunities (Kruger *et al.,* 2006). Claassen (2001) also confirmed that a third of farm workers and –dwellers have very low levels of formal education, if indeed any at all, and collectively have the lowest level of education in South Africa.

An income-generating intervention was formulated based on the results of the former skills development projects presented by Masetloa (2004), Botha (2005) and Du Plessis (2004), with the main aim to develop a feasible product to be manufactured and marketed by the female farm dwellers. Market research was consequently

conducted towards the latter part of 2002 by the researcher, to select and design a product range suitable for the level of skills present within the two farming communities (Van Niekerk, 2005). The selection of a suitable product range also depended on current market-related needs and shortages, for the simple reason that the higher the consumer demands, the better the sales figures would be. The chosen product would then be sold to generate a sustainable income for the female farm dwellers and would at the same time address the market-related needs. This initiative gave birth to the "Holding Hands" project. The participatory action research model (PAR) was chosen for this project, as it was thought to be an excellent way in which researchers and participants could learn from each other. It was also thought to provide a way towards sustainability for income-generating activities as described in 1.8.14, as well as in Chapter Three.

1.3 PROBLEM STATEMENT

As indicated in 1.2, Orientation, there is a definite need for income-generating activities in farming communities. However, history in the North-West Province told us that several income-generating activities were started through the years, but with relative to no long-term sustainability records.

Findings based on literature studies regarding community development and income-generating case studies, indicated the need for a combination of education and training in basic business skills and practical training. The combination is required for successful skills transfer (Rogerson, 2000; Gumede & Rasmussen, 2002). Income-generating projects cannot function independently without members being skilled in marketing, financial administration and advertising skills. Other skills such as product development and product diversification are moreover vital for success of income-generating projects (Gumede & Rasmussen, 2002).

A Non-Government Organisation (NGO) in the private sector, Financial Economic and Business Development (FEBDEV), was successful in providing training in basic business skills to adult learners with similar levels of education in the North West Province. FEBDEV was therefore identified to train the female farm dwellers in basic business skills.

The "Holding Hands" project managed to secure a reasonable income from product sales after one year of existence, but the sustainability of the project still had to be investigated and established. Sustainable interventions, such as training and education projects for empowerment had to include project management principles and processes (Miles, 2004:3). Criteria and dimensions that contribute to sustainability of income-generating projects, including the "Holding Hands" project, had to be established to be able to develop recommendations for sustainability indicators. Available literature indicated that development for true sustainability could only be achieved within twenty-five to fifty years. Each project within the community therefore had to include a set of indicators with a look into the future aimed at sustainable development. These sustainability indicators had to be community orientated and of a long-term nature. These indicators cannot be formulated without including members of the community, acknowledging linkages within the economy, environment and society or considering carrying capacity and measurability (Hart, 1998:86).

The questions raised were whether the female farm dwellers would be able to function in a sustainable manner and without the aid of a facilitator (taking into account their current skills levels and isolation), and whether all the systems would be in place, especially such principles as are typically associated with project management and business practices. Performance indicators had to be developed to ensure that facilitators would know when members would be ready to proceed to the next skills level or when additional training would be needed. Formal or informal skills assessments therefore had to be in place. Performance models, from literature, indicated the need to focus on input, processes and outputs for efficiency (Miles, 2004:3). It is not the intention to address all these performance initiatives in this study, due to the extent of such a study. The study will therefore be focused on the input and process initiatives only.

The next section will be devoted to the role of the consumer scientist in South Africa, with regard to achieving sustainable development within disadvantaged farming communities.

1.4 SUSTAINABLE DEVELOPMENT AND THE ROLE OF THE CONSUMER SCIENTIST

The modern consumer scientist has a vital role to play in addressing the underlying issues of disadvantaged communities. For consumer scientists to be able to address the difficulties communities face, especially in South Africa, a global perspective must be adopted (Erasmus *et al.*, 2001). A global perspective focuses on problem solving and the impact local behaviour has on surrounding communities and other parts of the world (Erasmus *et al.*, 2001). The consumer scientist therefore has to implement a life-long commitment and willingness to support sustainable development by means of supporting responsible consumer behaviour and consumption of resources (McGregor, 1998).

Boshoff (1997:1) defines consumer science as a multidisciplinary science incorporating the physical, psychological, social and material well-being of the consumer. The consumer includes the individual, families (households) and communities. Families and households are seen as the fundamental unit of society, strengthened through creating diversity awareness. This is done by the use of knowledge for responsible resource management, child development and supplying in the needs and requirements of individuals, families and communities (Pennsylvania Department of Education, 2002:1; Boshoff, 1997:6; Erasmus *et al.*, 2001). Management, training and research of small households, their resources, finances, work efficiency, environment and housekeeping are further encouraged (Boshoff, 1997:6-7). The Oklahoma Cooperative Extension Service (2006:1) further included the promotion of home-based and micro businesses, leadership development and emergency preparedness as vital responsibilities of the consumer scientist. These tasks are divided within the areas of study namely foods and nutrition, clothing and textiles, housing and development of the individual, families and the community as a whole (Boshoff, 1997:6; SAAFECS, 2006:1; American Association of Family and Consumer Sciences, 2006:1).

The South African consumer scientist specifically has the duty of encouraging an appreciation for the consumption of local products amongst consumers. Disadvantaged communities should be encouraged and assisted to collaboratively produce local products in demand with more affluent communities in South Africa. Emphasis should be placed on empowering these disadvantaged communities.

South African consumers should then be educated to place value on buying locally produced products from these communities (Gussow, 2000). Growth and prosperity within communities can only be achieved through promotion of consumption of local products and services (Erasmus *et al.*, 2001).

This study has been designed based on the role of the consumer scientist to assist in achieving sustainable development through the empowerment of communities. The aims and objectives of the study will subsequently be highlighted.

1.5 AIM AND OBJECTIVES

1.5.1 Aim

The aim of this study was to investigate factors that could be classified as necessary and contributing with regard to sustainable income-generating projects applicable to a farming community.

1.5.2 Specific objectives

The objectives of the study were to

- identify criteria from literature that would be regarded as indicators of sustainability;
- analyse South African income-generating projects in order to determine factors contributing to sustainability (projects similar to and including the "Holding Hands" project);
- development and measuring of sustainability indicators; and
- provide recommendations for income-generating projects similar to the "Holding Hands" project.

1.6 METHODOLOGY

A literature survey was conducted to further identify sustainability factors and gain information from various income-generating projects.

A qualitative research design was followed, in order to determine the factors contributing to project sustainability. Informal telephonic and face-to-face interviews were conducted with community project leaders or facilitators. A quantitative research strategy was introduced to analyse the income-generating projects. Structured questionnaires were e-mailed and faxed to project facilitators and where needed telephonic interviews were held with facilitators. The research design was cross-sectional and made use of a number of cases to detect patterns of association. Opportunity and snowball sampling were applied to select the target population.

To recommend sustainability indicators a Participatory Action Research (PAR) model was applied to the "Holding Hands" project in order to incorporate a people-centred approach, which focused on available assets and the creation of sustainable livelihoods within communities.

1.7 ETHICAL CONSIDERATIONS

This intervention study within the FLAGH programme has ethical approval from the ethics committee of the North-West University (01M04). There was also a special agreement between the research team and the farming communities to uphold anonymity.

1.8 KEY CONCEPTS

It is essential to define and clarify a number of related key concepts. The concepts include the farm dweller, farming community, assets, capabilities, income-generating and productive activities, livelihoods, poverty, micro-enterprises, micro-finance and credit interventions. Concepts such as carrying capacity, indicators, sustainable development, PAR and community development will also be defined.

1.8.1 Farm dwellers

Farm dwellers, for the purpose of this study, are defined as farm inhabitants not working on a particular farm. Occasional contract work provides these farm dwellers with a temporary income. Female farm dwellers possibly have husbands or often other family members working on the farm (Masetloa, 2004:9; Du Plessis, 2004:11). Farm dwellers in South Africa generally have no substantive rights such as farming

rights and rely on the farmer for basic necessities (Mngxitama, 2004), such as housing, food, schooling and health care.

1.8.2 Farming community

For the purpose of this study a farming community referred to as where several households live together on one farm.

1.8.3 Assets

Assets are resources applied to create livelihoods by means of owning or directly controlling these assets, or having access to assets not belonging to the individuals or communities (De Satgé, 2002:xix; 61). Chambers & Conway (1992:7-8) believe assets to encompass stores, resources, claims and having access to different types of capital. Assets are furthermore described as sources of livelihoods, affected by seasonal and historical trends (De Satgé, 2002:61). An asset-based approach "considers links between households' productive, social and locational assets" (Siegel, 2005:1). It is furthermore essential to recognise that long-term growth and reduction in poverty levels is determined by the productivity, quantity and quality of these assets (Siegel, 2005:6).

For the purpose of this study assets are also referred to as factors. Economic, social and environmental factors or assets are categorised as the dimensions of sustainability.

1.8.4 Capabilities

Capabilities are described as the knowledge, skills and the ability to be productive (De Satgé, 2002:xix). Household capabilities include local knowledge about the environment, local production- and entrepreneurial skills (De Satgé, 2002:98). A specific community might have certain assets, but not the capability to utilise the resources. It is important to realise that assets alone will not ensure the creating of livelihoods (Anon, 2001:1).

1.8.5 Productive activities

Productive activities secure livelihoods and are, *inter alia*, differentiated by gender and age (De Satgé, 2002:64; 89). The type of productive activities engaged in, depending on the available assets and capabilities, will determine the livelihood strategies employed by a community. Productive activities incorporate income-generating activities, but focus on empowering communities to obtain credit and also address gender issues, further improving women's positions in the household and community (Albee, 1994:4). Productive activities therefore include all actions to maintain and improve the standard of living. These activities do not necessarily lead to income-generation, but incorporate traditional skills such as building, gardening and keeping cattle for family use.

1.8.6 Income-generating activities

Income-generating activities are initiatives that affect the economic aspects of people's lives through the use of economic tools such as credit (Albee, 1994:2). Skills, capabilities and assets are as a result employed to generate an income from engaging in productive activities. Examples of income-generating activities include brewing beer, baking bread, processing food for sale and collecting honey, wild fruits, firewood or medicinal herbs. Informal employment or "piece" work and other activities such as gardening, small-scale farming, weaving, sewing and other craftwork are also examples of income-generating activities.

1.8.7 Livelihoods

De Satgé (2002:3) defines livelihoods as assets, capabilities and activities required for a means of living, including capital and a multitude of recourses. Sustainable livelihoods generate coping and recovering strategies for a number of shocks (e.g. the death of a breadwinner) and stresses (e.g. caring for a sick person in an already impoverished household) placed on individuals or a community at any given time. Livelihoods should therefore be sustainable and aiding in maintenance and in enhancing assets and capabilities, even for the next generation.

1.8.8 Poverty

Poverty is a social reaction to a specific situation such as a shortage of monetary resources (Simmel, 1978:479). Poverty is often a temporary state for many households, living either just below or just above the poverty line. The poverty line is defined by the World Bank (2004:1) as living on less than one US dollar per day. Poverty is much more than shortage of monetary resources, but also "unemployment, inequalities, the lack of growth of the industrial economy and high population growth" (Möller *et al.*, 2002:27). Characteristics of the poor include "physical weakness, isolation, vulnerability, powerlessness and meaninglessness". Some of these characteristics may also lead to poverty (De Beer, 1997:9-13). Households are vulnerable to poverty, because of changing asset-context situations and livelihood strategies (Siegel *et al.*, 2003; World Bank, 2001). The poor, according to the asset-based approach, are either "asset-poor", having access to limited assets or holding assets with limited returns or are unable to exploit these assets (Siegel, 2005:7).

1.8.9 Micro-enterprises

Micro-enterprises are simply seen as businesses that employ fewer people and that require multi-skilled individuals (Sandbeg, 2003; Rogerson, 2000). These types of enterprises in South Africa generally consist of five to fifty employees, whereas in other countries the number ranges between five and ten (Mead & Liedholm, 1998). These types of businesses provide a multitude of opportunities and challenges to individuals. Generally "creativity, interest, involvement and effort" is encouraged, due to special requirements of specialisation and versatility. Other characteristics of micro-enterprises include flexibility, constant dynamic changes in marketing strategies, quick response and turnaround time (Harrison & Dunne, 1998; Simpson & Taylor, 2002).

1.8.10 Micro-finance and credit intervention

Small-scale lending programmes are known as minimalist credit programmes or micro-finance (Biggs *et al.*, 1991). The United States Agency for International Development (1989) defines minimalist or micro-credit interventions as small credit assistance programmes, where small amounts are lent to poor and landless

individuals or communities. The individuals are seen as a resource whose productivity can be enhanced with some assistance.

1.8.11 Carrying capacity

Hart (1998:29) defines carrying capacity as the limit or size of the population able to survive infinitely on available resources, without destroying the environment. The carrying capacity indicates whether the community is using resources faster than they are renewed or replaced (Hart, 1998:99).

1.8.12 Indicator and sustainability indicator

An indicator is used to measure, indicate and point out a sign, symptom or index to show the state of affairs within a system (Hart, 1998:36). Indicators measure the progress towards a set goal. Sustainability indicators measure the progress towards sustainability of the project or activity (Hart, 2000:1).

1.8.13 Sustainable development

Sustainable development according to the Brundtland Commission Report (1987) is development that "meets the needs of the present without compromising the ability of future generations to meet their own needs". The Cassell Concise Dictionary (1997:1485) further defines sustainability as: "to stand; to undergo without yielding; to enable; to bear something; to keep from failing; to strengthen; to encourage; to keep up; to prolong; to maintain; to uphold; to establish by evidence". A simple example of sustainable development is one of change and making things better (Hart, 1998:27). The World Bank (1996) emphasises the obligation of involvement of participants in the planning- and decision-making processes of sustainable development, therefore transferring ownership of the development intervention.

1.8.14 Participatory Action Research (PAR)

Neuman (2000:25) describes PAR as practical research, combining research and social action. Communities or individuals studied are actively involved in the research process and local knowledge is incorporated in decision making. PAR also focuses on empowerment and seeks to increase awareness and knowledge. Babbie

(2001:288) emphasises the researcher's role within the PAR's research paradigm by explaining it as follows: "to serve those being studied, usually disadvantaged groups, to empower them to act effectively in their own interest". Holman (1987) combines social investigation, educational work and action as integrated activities of PAR. Gardner (2004) and Khanlou & Peter (2005) emphasise that PAR removes the distance between the objective observer and subjective subject.

1.8.15 Community development

FitzGerald (1980:34-35) defines community development as "a movement designed to promote better living for the whole community with the active participation, and if possible on the initiative of the community, but if this initiative is not forthcoming spontaneously, by the use of techniques for arousing and stimulating it, in order to secure its active and enthusiastic response movement". Community development forms a part of community work, defined as any work of a social nature that is done within a community (Venter, 2004). Assisting communities and individuals to learn to think, creating links between events and processes, should as a result be a vital component of community work and –development (Munslow *et al.*, 1995:25).

1.9 STRUCTURE OF THE DISSERTATION

This dissertation follows an article format, where a scientific research article is included in Chapter Three. The chapter allocation is as follows:

Chapter 1: Background and problem statement
A background and extensive orientation and problem statement is provided in Chapter One. The aim and objectives, methodology and key concepts are additionally discussed. Attention is also given to the role of the consumer scientist in sustainable development of communities, as well as to the specific role of the researcher (author) in this project.

Chapter 2: Literature review
The first section of the literature review consists of an overview of income-generating activities. Elements of the review include a livelihoods approach for community development, women's income-generating activities, reviving traditional skills for income-generation and the role of micro-finance with regard to income-generating

activities. The next section of the literature review focuses on sustainability and indicators, giving attention to the dimensions of sustainability.

Chapter 3: Research article – The identification of sustainability factors to guide income-generating projects for women in disadvantaged farming communities

The research article contains an analysis of the "Holding Hands" project and a few other similar projects in South Africa, according to selected sustainability factors and -dimensions. This article points out the importance and procedure of making use of a Participatory Action Research (PAR) method. This was done to implement a training and education programme in a participative manner. The article was prepared to submit to the journal of family ecology and consumer sciences.

Chapter 4: Discussion of the sustainability indicators for women's income-generating activities in a disadvantaged farming community

The research article in Chapter Three, concentrating on the PAR process, provides the foundation for Chapter Four. Chapter Four presents sustainability indicators and a checklist based on the "Holding Hands" project experiences *en route* to sustainability, according to findings and results from the research article. PAR, to a certain extent, is therefore part of the criteria necessary to compile a checklist for sustainability. The participatory approach reveals and confirms vital stages of the developing and training process. Brief attention is also given to the limitations of income-generating projects and possibly why some projects do not succeed.

Chapter 5: Recommendations and conclusions

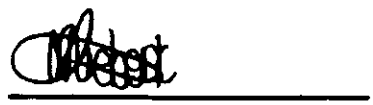
The last chapter summarises findings of the study, provides recommendations for further research and comes to a logical conclusion.

1.10 AUTHOR'S CONTRIBUTION

The researcher (author) did her honors and masters study in Consumer Sciences at the North-West University on this project. The role of the researcher in this multidisciplinary and multisectoral study was that of facilitator, educator and marketing person. The researcher (author) performed this role from 2003 as a honnors student in Consumer Sciences.

I solemnly declare that I have written the research article independently with the help of my two supervisors Dr. A. Kruger and Mrs. M. Larney. My role was as follows:

1. Conducting a literature review.
2. Comparing and analysing various similar income-generating projects, by means of questionnaires and telephone interviews.
3. Analysing the "Holding Hands" project according to the sustainability factors.
4. Compiling a list of sustainability indicators and a checklist with the help of the "Holding Hands" participants.
5. Preparation of the manuscript.



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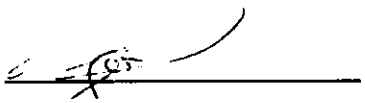
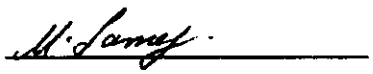


Dr. A. KRUGER (SUPERVISOR)



Mrs. M. LARNEY (CO-SUPERVISOR)

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CHAPTER 2: LITERATURE REVIEW

2.1 INTRODUCTION

A considerable percentage of rural people are trapped in poverty, with inadequate land or even facing landlessness (Mngxitama, 2004). Poor, rural farming communities therefore find it difficult to be empowered and to be self-sufficient, due to the lack of basic infrastructure and services (Mahmud, 2003; South African Human Rights Commission, 2003). These communities have limited access to assets, capabilities and consequently livelihood opportunities. Other challenges include not being able to gain access to markets, access to capital or start-up finances, infrastructure support and most of all, education and training (Rogerson, 2000). Rural farm dwellers in general are moreover identified as individuals with low self-esteem, low levels of education and generally strong cultural values (Siegel, 2005:7).

Small- and micro-enterprises are often the key players for the success of rural development due to the fact that they provide social structure (Fielden *et al.,* 2003). Emmett (2000) emphasised the strong relationship between community development and participation, with the assumption of the existence of a community and the members' ability to participate in their own development. The primary aims of community development include socialisation, shaping of values and developing of abilities. Secondary aims include institutional, political, economic, physical and social development (Botha, 1985:28-35; Du Preez, 1981a:125-137; Du Preez, 1981b:72-82; Hugo, 1981:163-168; Visser, 1985:25-29).

Asset- or resource assessments, utilising participatory methodologies, place the emphasis on available resources and not on the lack thereof. Communities therefore identify and satisfy their own needs, utilising local resources to the maximum (Kotzé, 1987:32; Wessels, 1990:27). Productive- and income-generating activities, utilising local available resources, generally benefit the entire community and tend to reduce poverty and add to the feeling of well-being (Mehra, 1997). Improved well-being is achieved by management and a combination of diverse assets including physical, human, financial, natural, intellectual and social assets (World Bank, 2002). Well-being is often more readily measured in terms of tangible

aspects such as income and consumption, savings, food security, nutritional and health status (Siegel, 2005:7). Intangible measures of well-being, such as "perceptions of self-esteem and empowerment, hope for the future; and leisure and recreation" should not be neglected.

This literature review will consequently focus on a number of relevant concepts, including income-generating activities and the need for such activities. The importance of a livelihood approach concerning community development will be addressed. Reviving traditional skills for income-generation and the role of micro-credit interventions are additional concepts that will be clarified. The following section of this chapter includes guidelines for developing sustainability indicators and provides insight into the dimensions of sustainability.

2.2. INCOME-GENERATING ACTIVITIES

Rural women have difficulty finding employment opportunities due to various reasons. These could include: family obligations such as childcare, lack of appropriate skills and education, and limited job opportunities (Sandbeg, 2003; Fielden *et al.*, 2003). A shortage of skills and the occurrence of illiteracy enhance the lack of self-confidence, leading to a feeling of helplessness (Siegel, 2005:7; Horn, 1993). A solution to the dilemma of unemployment would be to become self-employed and to increase the level of education and training. Poverty, lack of employment opportunities and lack of income motivate women to engage in income-generating activities (Mavalela *et al.*, 2002; Manning, 1993; Wentzel, 1993; Nobanda, 1998). Rural women are for these reasons urged to utilise their domestic space for income generation (Mahmud, 2003).

2.2.1 Livelihoods approach for community development

De Satgé (2002:3) define livelihoods as assets (stores, resources, claims and access), capabilities and activities required to meet basic daily needs. Another approach to define livelihoods is that of a "holistic view which unites concepts of economic development, reduced vulnerability and environmental sustainability while building on the strengths of the rural poor" (Shackleton *et al.*, 2000:36). Titi &

Singh (1994) defined livelihoods as individuals' capacity to develop their well-being for present and future generations. Capacity is reliant on the accessibility and availability of opportunities, including participatory decision making, access to resources and equity.

Capabilities facilitate freedom and the ability to achieve different lifestyles. Household capabilities furthermore include local knowledge about the environment, local production and entrepreneurial skills (De Satgé, 2002:98). Capability allows individuals and communities to have control over their own lives and to make their own decisions. Quality of life is consequently seen as the activities that individuals value and their capability to carry out these activities (Anon, 2001:1). Mehra (1997) is of the opinion that it is easier to expand women's capabilities than their opportunities.

Turner & Pinkett (2000:2) emphasised that community revitalisation occurs on two levels, namely on a needs-based level (focus on deficiencies) and on a capacity-focused level (focus on available assets). The needs-based approach works from the outside in, beginning with the problems within a community and the assets they lack. The livelihoods approach (capacity-focused level) seeks to establish community strategies, focusing on community accessible assets, opportunities and capabilities (Kretzmann & McKnight, 1996; Eloff & Ebersohn, 2001). The livelihood approach recognises skills, talents, resources, networks and institutional capacity of communities and individuals (Turner & Pinkett, 2000:2). Focusing on natural talents and creative skills of individuals has an empowering affect, which increases self-respect, self-worth and self-confidence (Horn, 1993:86). The livelihoods approach includes aspects such as project ownership, shared responsibility, flexibility, sharing between group members, group support, and capacity building (Eloff, 2003). This is an inside out, bottom up approach. These initiatives, even if they are "small beginnings", help to build "social capital, promote social integration and gender equality, reduce independency, unlock resources and build livelihoods" (De Soto, 2000:xx).

Households use their assets and capabilities by pursuing livelihood strategies to generate livelihood outcomes such as increased income, food security, equity and well-being (De Satgé, 2002:60). A participatory approach to creating livelihoods

includes a process of designing a method, such as an activity matrix to guide participants to analyse their own unique livelihood position. Improving livelihoods furthermore creates coping and recovering strategies for a number of shocks and stresses placed on individuals or a community at any given time (Carney, 1999:4).

Livelihood indicators measure the sustainability of livelihoods, maintaining and enhancing assets and capabilities for future generations (Chambers & Conway, 1992). According to Schoones (1998) indicator themes can be derived from answering the following questions:

- How are livelihood strategies combined with productive activities (working days) to generate income, products and social advantages?
- How do livelihood strategies reduce poverty?
- How do livelihood strategies increase household well-being, capabilities and self-worth?
- What is the extent to which these strategies absorb shocks and stresses?
- How do livelihood strategies affect the natural resource base?

Livelihood strategies include women's income-generating activities by applying resources and capabilities. The next section will give attention to this all-important coping mechanism as a strategy to overcome poverty.

2.2.2 Women's income-generating activities

Income-generating activities are aimed at promoting the economic, social and political positions of individuals and communities (Albee, 1994:2; USAID, 1980). Improved economic positions imply more money to allocate for family, community or personal use. Better social positions allow for higher status within the community and increase in strength from working together in a group (Due, 1991). Mavalela *et al.* (2002) highlighted the fact that rural communities often view income-generating activities as "self-activities" or "self-help", applied to obtain an income and to sustain their basic needs. Self-help groups form within communities in order to cope with common problems and to satisfy a particular need, such as unemployment (Mavalela *et al.*, 2002).

Productive activities include income-generating activities, but focus on empowering individuals and communities to obtain credit to expand income (Albee, 1994:4). These activities therefore include credit and savings mechanisms, labour-saving technology, child-care development, and skills and business training (Albee, 1994:23). Combined with credit interventions, productive activities aim to establish networks and collective actions, such as self-help groups (Rwelamira, 2001).

Communities, and especially women, are empowered as a result of economic opportunities, therefore developing decision-making and problem-solving skills (Noponen, 2003:9). Decision making is not possible if women do not have access to information and resources, which can only be achieved by means of livelihood strategies, upliftment and empowerment (Schreiner, 2005:1).

Women from disadvantaged communities often find it difficult to identify and utilise traditional skills for income-generating purposes. Community facilitators and researchers have the task to re-discover and revive these skills. The next section of the literature study will as a result address the reviving of traditional skills.

2.2.3 Reviving traditional skills for income generation

Reviving traditional skills and crafts is part of creating sustainable livelihood strategies for the present generation, but also for future generations (De Satgé, 2002). Community development relies on discovering and developing latent potential of individuals and communities (Hugo, 1981:164). Production of traditional crafts generally requires modest capital investments, but is labour intensive (Horn, 1993:87). Women from rural, disadvantaged communities often have the time to produce these crafts, but little or no available capital to invest. Despite this reason, women with limited or no formal education are able to generate an income from creating products in line with traditional crafts.

Traditional arts and crafts products are generally unmarketable due to inferior quality or because of impractical designs. These products are undesirable and often either too expensive for local markets, or too low-priced to be able to generate a reasonable profit. Marketing consultants or facilitators, conducting

market research, could easily transform these impractical items into desirable products (Mavalela *et al.*, 2002). Additional training in business skills will allow individuals and communities to sell the crafts to generate an income. Visiting other related projects or receiving demonstrations broadens the minds of individuals or communities to develop their own unique style according to available skills (Brits *et al.*, 2000).

Women in rural disadvantaged communities often face various challenges, especially financially. Micro-finance plays a vital role in obtaining funds for income-generating projects. Section 2.2.4 pays attention to the role of micro-finance with regard to women's income-generating projects.

2.2.4 Role of micro-finance in income-generating projects

Informal income-generating activities across rural and urban areas in South Africa have emerged in an astonishing way, due to the need for additional income to sustain families and to overcome poverty (Manning, 1993; Wentzel, 1993; Nobanda, 1998). Productive- or income-generating activities are mainly conducted from individual homes or even clusters at a central, informal venue. Traditionally women entrepreneurs gather start-up capital from friends, family or own savings, rather than approaching formal institutions. The reason for this being: a lack of self-confidence; a lack of an asset-base; and an inability to penetrate traditional male-dominant networks amongst financial institutions (Rogerson, 2000).

The need for small-scale lending programmes, micro-finance or minimalist credit programmes in South Africa has grown tremendously in recent years (Biggs *et al.*, 1991). These programmes should incorporate credit interventions, lending small amounts to the poor and landless communities (The United States Agency for International Development, 1989). These credit interventions should not only provide communities with financial assets to generate an income or provide temporary increase in income, but also provide training to deal with markets and the economic sector (Biggs *et al.*, 1991). The above can only be achieved when participatory and/or livelihoods approaches are followed (Albee, 1994:5).

The next section of this literature study will address the various sustainability indicators for income-generating projects, as a means of measuring sustainability. The factors and dimensions contributing to sustainability of income-generating projects will in addition be discussed.

2.3. SUSTAINABILITY INDICATORS AND DIMENSIONS DIRECTED AT INCOME-GENERATING PROJECTS

Available literature regarding income-generating activities and sustainable development reveals a number of recurring factors or dimensions contributing to the sustainability of projects. These dimensions are grouped in five main categories namely economic factors, environmental factors, social and cultural factors, human factors, institutional or political factors (United Nations Atlas of the Oceans, 2005; De Satgé, 2002:65; Wassermann & Kriel, 1997; The National Curriculum in Action, 2005; Chambers & Conway, 1992; Munslow *et al.*, 1995; World Bank, 1996; Hart, 2000b:2). The combination of these factors or dimensions provides an excellent base for development projects *en route* to sustainability.

This section of the literature reviews and emphasises the concept of sustainability in more detail and also incorporates its various dimensions. The concept of sustainability indicators is briefly discussed, and traditional and sustainable indicators are also compared. Guidelines to developing sustainability indicators, based on specific income-generating activities, will further be addressed.

2.3.1 Dimensions of sustainability

Hart (2000d:1) identified three characteristics for successful and sustainable projects, namely: a) a community vision of future balance required between the sustainability dimensions; b) involving the entire community in this vision and c) to be able to track the progress of reaching this vision. Dimensions of sustainability address the very definition of sustainable development, namely that which is to be sustained, for how long and what it is that has to be developed (Kates *et al.*, 2005). Three main areas of sustainability include nature, life support and community. Nature includes earth, biodiversity and ecosystems, whereas life support

encompasses ecosystem services, resources and the environment. Community on the other hand includes cultures, groups and places. The United Nations Atlas of the Oceans (2005); De Satgé (2002:xxi) and Kates *et al.* (2005) distinguished between the following dimensions of sustainable development:

- Elimination of poverty and deprivation, establishment of wealth, productivity, and consumption of goods and services (economic factors).
- Conservation and enhancement of resources to be able to eliminate poverty in the long run (environmental factors).
- Cultural and social development, institutions, child survival, life expectancy, education, equity and equal opportunities (society).
- Institutional and political development.

For the purpose of this literature study these dimensions will be addressed, also looking at human factors, including human ability, skills and knowledge.

2.3.1.1 Economic factors

Economic factors should be concerned with the quality of economic activities, rather than the quantity of economic activities. Quality of economic factors includes resilience, consistency and the ability to constantly improve resources (GDRC, 2006:1). The relevant needs of community members should therefore be addressed, considering the environment and available resources at all times. Economic factors include income from productive activities such as income-generation, pensions, keeping cattle, other farming activities, subsidies, illness allowances and sources of informal credit (De Satgé, 2002:63). Income from productive activities includes "diverse small business promotion, co-operative undertakings, job creation schemes, sewing circles, credit and savings groups" (Albee, 1994:2). Physical assets, for example a home, as well as economic tools such as credit, can be utilised to generate financial assets by starting a home-based income-generating initiative. Assets are therefore simultaneously physical in nature and have the ability to "generate surplus value", thus increasing productivity (De Soto, 2000:41). Economic factors, as can be expected, contribute to production, sustainable income and consumption (Anon, 2001:1; Albee, 1994:2).

- *Sustainable income*

A large number of development programmes and development interventions focus merely on improving the economic situation of communities, rather than a combination of social and economic factors. Human assets such as education and training are vital for successful income generation. Despite the fact that the other dimensions of sustainable development complete the picture, an increased level of income remains a significant motivator. Income satisfies basic physical needs, establishes social structure, provides social status within communities and empowers individuals to do more (Due, 1991). Hart (2000f:1) warned not to focus only on Gross National Product (GNP) or per capita income as an indicator, which includes rate of production or rate of consumption. GNP includes deprecation and taxes and other non-market activities, for example volunteer work and charity (Hart, 1998). Economic sustainability indicators will focus rather on the number of hours of paid employment and the wage required for supporting basic needs and not only on the available employment (Hart, 1998:73).

- *Employment opportunities*

Indicators normally focus on the rate of unemployment and the number of jobs available. Sustainability indicators investigate the "diversity and vitality of the local job base and initiatives such as income-generating activities" (Hart, 2000f:1). Skills levels required for available jobs and possible initiatives are additionally considered when compiling sustainability indicators (Hart, 2000f:1).

- *Savings schemes*

Financial institutions lending money to micro businesses encourage regular savings of small amounts. Savings programmes encourage women to save money to accumulate start-up capital and to be able to apply for more substantial loans (Anon, 1998/9). Savings provide security, confidence and unity that are generated from productive activities in the group (Mwaniki, 1986:217). These programmes should therefore also be included in credit interventions and productive activities.

Saving schemes, with specific reference to income-generating projects, should further include the saving of a certain percentage of profits to be able to buy new stock. In this way a healthy cash flow can be secured.

- *Access to credit*

Poor, rural communities are generally most vulnerable to economic shocks (Biggs *et al.*, 1991). These communities generally have limited resources and credit collateral requirements are often not met. Individuals wishing to take a loan from a financial institution are often encouraged to form groups to share the responsibility of repaying the loan (Biggs *et al.*, 1991). Access to credit according to Guttman (1994:11) and Le Roux (1998:28) is one of the main reasons for group forming. Individuals are still responsible for loans, but assets are combined for security and responsibility of repaying the loans shared. Loans provided to the groups are initially quite small, but larger amounts are provided upon successful repaying of the small loans (Guttman, 1994:13). The loan structure is performance-based (Anon, 1998/9). Repayment structures include small amounts at regular intervals.

2.3.1.2 *Human factors*

Human factors include skills, knowledge, the ability to be productive, nutritional and educational status. The ability to take decisions, project-related interaction among people and finding and applying information are also classified as human assets (De Satgé, 2002:62; Siegel, 2005:7; Hart, 1998:31). It is vital to consider the number of learners trained and empowered with skills relevant to available, local job opportunities such as would be part of an income-generating group (Hart, 2000f:2). Learners from the community, leaving for training away from the area ought to be able to return after training, thus investing their knowledge in the local community.

Human factors together with economic factors provide the foundation for sustainable income-generating projects, which ensure sustained participation by all members in all activities (Wassermann & Kriel, 1997:46). Human factors should furthermore meet environmental priorities, such as available resources and the sustainability thereof (GDRC, 2006:1). Human factors subsequently have to be

enhanced if sustainability is to be achieved (Hart, 2000a:1). A number of human abilities, incorporated within human factors vital for sustainability of income-generating projects, will be addressed, namely initiative, leadership, human relationships, the ability to organise and technical skills (Wassermann & Kriel, 1997:57).

- *Initiative*

Community members that have taken ownership of a project, show initiative to evaluate project experiences and performances, that in turn would increase self-confidence (Linneman, 1983:67-68; Henderson & Thomas, 1987:303-304; Lombard, 1991:289). An increase in self-confidence convinces group members that they are able to launch new projects on their own. They recognise their own abilities and characteristics contributing to the project requirements (Wassermann & Kriel, 1997:46). A sense of responsibility is consequently developed from inputs and hard work on projects.

- *Leadership*

In many instances, community leaders and community facilitators emerge who delegate responsibilities and show true willingness to take decisions independent of an external facilitator or external community developer (Linneman, 1983:67-68). These actions are a clear indication of emerging leadership among members. Leadership is further defined by a holistic approach to problem solving. Community members must be able to fulfil the required tasks and in the end literally take over the role from the facilitator or community developer on the following:

- Administration of the project (Lombard, 1991:195-197; Barnard, 1989:150).
- Consultant to potential clients in product selection (Barnard, 1989:144).
- Project co-ordinator (Lombard, 1991:191-192).
- Educator of new members (Barnard, 1989:143; Lombard, 1991:191-192).
- Facilitator (Barnard, 1989:145; Lombard, 1991:182-184).
- Mediator when conflict among members arise (Lombard, 1991:198).
- Motivator to finish the task at hand (Lombard, 1991:192).

Group leadership skills are furthermore essential to reach goals and purposes, at the same time accomplishing certain required tasks (Toseland & Rivas, 1998:103). These skills are generally revealed during group meetings. Ordinary members are subsequently involved in tasks such as planning and problem solving. Group leadership skills are developed through role-play exercises and establishment of group dynamics (Toseland & Rivas, 1998:116).

- *Human relationships*

Project group members share a common identity from working together, meeting deadlines and sharing experiences. A sense of solidarity and co-operation usually develops among community members. Members should be emotionally equipped with loyalty, responsibility, autonomy, reliability and morality to enrich the personalities of individuals (Du Preez, 1981b74-75; Hugo, 1981:164; Visser, 1985:26). Established communication channels further lead to positive relationships among community members (Pretorius, 1988:106), and in this way growth and self-empowerment will be enhanced.

The size of the group of women working together to generate an income is vital. Groups generate interaction from awareness of close proximity to other members, establishing lines of communication and the need to access resources and support (Douglas, 1995:46). Interaction in turn shapes norms when members express preferences, share experiences and communicate views (Toseland & Rivas, 1998:79). The nature of the activities, relationships and logistical arrangements will direct the size of the group. The group has to be manageable and good human relationships should be maintained at all times (McTaggart, 1989:3).

- *Ability to organise*

Larger income-generating projects that have been in existence for a while, often find it difficult to manage the size of the groups. Toseland & Rivas (1998:159) suggested that the group size be directed according to the purpose and desired outcomes of the group. The group size of income-generating projects should generally be between six to twelve members for ease of training and management (McGraw-Hill Companies, 2005:1). Other studies indicate optimal size for task

groups to be between five and seven members (Toseland & Rivas, 1998:159-160). The group has to take responsibility to subdivide the group whenever possible, choosing a central location for the new group. Doing so, the members prove to be able to organise and constantly improve their method of work. Advantages of smaller, manageable groups include solidarity, better quality control, keeping track of orders and general logistical considerations, such as the size of the available venue (Douglas, 1995:119). Within smaller groups it is usually easier to attend to the problems and praises accompanying interaction, and consequently easier to generate understanding among stakeholders, spread information or encourage and listen to opinions as well as to facilitate group performance (Douglas, 1995:46).

- *Technical and business skills*

Sustainable income generation requires the application of appropriate technologies. This is done not only by considering the environmental concerns, but also integrating communities into the economy by applying available skills with appropriate available technologies. Community members must learn to collect relevant information, addressing current and future market needs: therefore in a sense becoming "researchers" themselves (Linneman, 1983:67-68).

Awareness ought to be created to identify accessible internal resources, such as available skills within the group to create a specific product, in order to rely less on external resources (Ebersöhn & Mbetse, 2003:325). An example of external resources includes technical skills or equipment necessary to create a product, which is not present within the group, for example computer pattern making. Technology constantly evolves and knowledge regarding production techniques also improves. For this reason it is important for members to seek new diverse techniques for production processes, where constant skills training would be required. This is important for staying price competitive and to reduce production time (Manning, 1993:82-83).

The facilitator has to keep in mind that the community members should also learn when it is necessary to employ technical support if they are not able to cope with existing skills. Community members should therefore be in touch with their abilities and recognise those abilities they require. Advanced systems (including quality

systems, product-costing skills, craft production skills and marketing skills) should further be put in place (Manning, 1993:82).

2.3.1.3 Social and cultural factors

Social factors are defined as the social resources that people draw upon in search of livelihood strategies and objectives (De Satgé, 2002:62). Individuals are as a result the building blocks of a community, thus contributing skills to perform the task of establishing improved livelihood strategies. Socialisation and enculturation, being primary aims of community development, build social factors, which aim to form social structures, national consciousness and awareness of citizenship and solidarity (Botha, 1985:29; Du Preez, 1981b:73; Visser, 1985:26). Social factors are further enhanced through a "culture of human rights and democracy" (De Satgé, 2002:62). Other aspects such as the number of community members voting during elections and the number of voters attending town community meetings should additionally be used as a social sustainable indicator (Hart, 2000f:2). Collective community action groups often assist individuals in the group with household tasks (e.g. possibly paying a child's first school fees as well as contributions towards the building of homes) (Mwaniki, 1986). Creating networks is a notable advantage of collective community action and should be encouraged. Social cohesion, empowerment, sharing of ideas, building solidarity and organisational participation are additional elements of collective community action (Albee, 1994:23; Chambers & Conway, 1992).

2.3.1.4 Environmental factors

Land and other natural resources, including marine resources, available building material, wildlife, soils and climate, minerals and groundwater are examples of natural factors (De Satgé, 2002:62). Environmental activities include recycling trends, remanufacturing, rate of resource use and cost of solid waste disposal (Hart, 1998:132; GDRC, 2006:2). Sustainability requires individuals, households and communities to function within their environment, without depleting natural resources (Hart, 2000a:1). The importance of natural factors for sustainability as a result cannot be underestimated, due to environmental services and food supplies

derived from natural resources (Anon, 2001:1). The World Commission on Environment and Development (WCED) (1987) further confirmed this statement by emphasising the environment as a place where communities live. Development has no choice but to include attempts to improve and preserve a given community's environment. Environment as a result also constitutes of human actions, ambitions and needs (WCED, 1987).

Considering the concept of sustainable livelihoods reminds one that it is important to maintain and improve assets for present and future generations, subsequently also maintaining natural assets. Resources have to be renewed or replaced faster than the tempo of use (Quazi, 2001).

2.3.1.5 Institutional and political factors

Institutional and political factors ought to meet basic human needs, create a sense of equity to provide access to opportunities and employment (GDRC, 2006:4). Employment not only provides communities with access to job opportunities, but also the possibility to be promoted and to change jobs from time to time. Institutional and political factors, according to GDRC (2006:5), should further include new institutions, transparency, gender and racial equality, visions of sustainability and fostering values of sustainability. New institutions and structures aid in developing a sense of ownership and responsibility among community members. Transparency as well as sharing of information ensures true democracy and openness. Inequality is created when a strong difference between levels of education and training, availability of capital, financial assistance, access to infrastructure and technological skills takes place. Political rights or networks should preferably include a degree of inclusion and participation in political decision making (Siegel, 2005:7; South Africa, 1996).

Sustainable development, considering all of the above dimensions, is addressed by means of income generation. Income generation mostly involves economic factors, but without considering social and human factors and even the environment, it will not be possible to engage in sustainable income generation. The next section will concentrate on sustainable development by means of income generation.

2.3.2 Sustainable development by means of income-generation

Hart (1998:25) defines sustainability as "to keep in existence without diminishing, to nourish". Development is the process of "making something better" (Hart, 1998:27). As per the definition in chapter one, the Brundtland Commission Report (1987) and De Satgé (2002:xxi) define sustainable development as "meeting the needs of the present without compromising the ability of future generations to meet their own needs".

Sustainability is related to community well-being and quality of life, incorporating economic, social and environmental systems for a "healthy, productive and meaningful life" for present and future generations (Hart, 2000b:1; De Satgé, 2002:xxi). The economic, social and environmental systems within a community therefore have to be seen as integrated, balanced parts of achieving sustainable development (Hart, 2000b:3). Economic systems of communities that function within society require human interaction to generate an economy, such as the exchange of goods and services. The physical environment provides vital elements for survival such as air, water and food. The environment consequently has a strong influence on the shape of society (Hart, 2000a:1). Shared ownership provides the cornerstone for development and sustainability, thus solving problems through partnerships (De Soto, 2000:xx).

Sustainability indicators act as measures for sustainability. It is as a result vital to design and implement a set of clear and easily understandable guidelines where community members can measure and track the use of resources in all dimensions of sustainability.

2.3.3 Sustainability indicators

Indicators measure a community's ability to provide all the members with a "productive, enjoyable life" for present and future generations. These indicators should therefore be quantifiable (Hart, 2000a:2; Hart, 2000c:2). Indicators act as instruments for measuring sustainability, pointing to a specific issue, or how well a system works (Hart, 2000c:1). Sustainability indicators further provide the

community with an opportunity to determine what its basic needs are and how these needs will be efficiently met (Hart, 2000d:1). Indicators should be designed according to local community input in a participatory manner (Fraser *et al.*, 2005:115). Community members would then have the ability to participate in the process of development and establish sustainability indicators for present and future generations. According to Fraser *et al.* (2005:119) a number of steps are relevant when community members are engaged in developing or identifying sustainability indicators. These steps include:

- stakeholder identification and livelihoods analyses within the community;
- identification of possible indicators within the community together with stakeholders;
- consultation of literature to supplement selected sustainability indicators;
- implementation of indicators in the community and evaluation of these indicators;
- testing of the indicator short-list and conducting regular reviewing;
- re-evaluation of indicators together with the community; and
- implementation of final indicators and re-evaluation on a regular basis.

According to Hart (2000g:1) and Hart (2000c:2), effective sustainability indicators have the following common characteristics:

- The indicator must be relevant to the specific purpose of measuring.
- The indicator should be easily understood (also by non-experts) in order to know what message the indicator is conveying and what action should be taken.
- The indicator must provide reliable, trustworthy information, not necessarily indicating precision.
- The indicator should provide accessible and timely data in order to ensure appropriate action once problems arise.
- Indicators are generally quantifiable and do not only provide a general indication.
- Indicators help to establish a point of departure and give direction to development.

- Indicators point out links between economic, social and environmental systems, and areas of weakness.
- Indicators enable a shared vision and communication among people from different surroundings and who cherish different opinions.

Often the focus is placed on traditional indicators or measures, not taking all three dimensions of sustainability into consideration, therefore not following a true sustainability approach. As a result it is necessary to address traditional indicators to highlight the difference between the two approaches.

2.3.3.1 Traditional indicators vs. sustainability indicators

Traditional measures or indicators of sustainability are in general applied for developmental projects. These measures do not include considerations from all dimensions of sustainability (Hart, 1998:38-39). Purely measuring the number of available jobs is, *inter alia*, classified as traditional measures of sustainability. Traditional indicators as a result measure only changes in one part of the community separately from each other. These indicators often focus on traditional solutions, which often cause the community to be in an unsustainable situation in the first place (Hart, 2000c:3).

Sustainability indicators on the other hand integrate economic, society-related and environmental systems (Hart, 1998:39). Sustainability indicators will, for example, analyse the number of available jobs, according to cost of living, how much income is spent on groceries, the average income generated from these available jobs and whether the community is trained and equipped to obtain these jobs. Sustainability indicators should therefore connect to complete a "web of interactions" and a multidimensional system (Hart, 2000g:1-2). Data for sustainability indicators are often difficult to obtain and should include school systems, health officials and research conducted by local universities or non-governmental organisations.

2.3.3.2 Sustainable indicator checklist

Hart (2000e:1-2) focuses on twelve issues to be addressed when compiling a sustainability indicator checklist. These are the following:

- The carrying capacity of natural resources the community relies upon, identifying renewable, local and non-local resources.
- The carrying capacity of the local and superfluous global ecosystem.
- The carrying capacity of the surrounding natural beauty important to communities, such as rivers and mountains.
- The carrying capacity of human capital such as skills, knowledge, health, education and traditions.
- The carrying capacity of the social capital in the community, including support structures of friends and family, relationships and group action.
- The carrying capacity of human made and physical capital, such as infrastructure.
- A long-term vision should be employed, considering present and future generations.
- Diversity within the community should be addressed, not assuming the members within a community all have the same view of sustainability.
- Equity and fairness for all members of the community.
- Understandable and usable for all.
- The indicator should measure the link between the economy and society, society and the environment, and the economy and the environment.
- Sustainability of one community should not be at the expense of another community or that of global sustainability.

Table 2.1 provides a summary of this literature study, addressing the various dimensions of sustainability. These dimensions have been listed in two categories, namely traditional sustainability indicators and true sustainability indicators, with an example of each. In doing so the fundamental differences between these are highlighted.

Table 2.1: Sustainable indicators, which should be the norm vs. traditional indicators normally used during development projects (adapted from Hart, 1998; Hart, 2000c; Hart, 2000e; Hart, 2000g).

Traditional indicators	
Economic factors	Available job opportunities and purely income in numbers, not how it is allocated to sustain other resources
Human factors	Only training not considering traditional interests or skills required according to market needs
Social and cultural factors	Independent individuals, not networks and collaborative action to strengthen human resources
Environmental factors	Natural resources not used optimally, depleted and not allocated in conjunction with other resources
Institutional and political factors	Links between social structures to strengthen institutional and political factors, not considered
Sustainability indicators	
Economic factors	Sustainable income and how well income is distributed to maintain and increase other resources
	Employment opportunities and skills training accordingly
	Saving scheme
	Access to credit
Human factors	Initiative
	Leadership
	Human relationships
	Ability to organise
	Technical and business skills according to available job opportunities
Social and cultural factors	Networks
	Support structures
	Collective action
Environmental factors	Land, minerals, climate
Institutional and political factors	Level of inclusion in decision making

2.4 BARRIERS HINDERING SUCCESS AND SUSTAINABILITY OF INCOME-GENERATING PROJECTS

Community development projects and income-generating projects have a number of valuable principles, features and outcomes associated with them. These aspects are often not met and are the very reason for unsuccessful practices within rural communities, creating frustration and disappointment in all stakeholders.

2.4.1 Community development principles are not met

The principles of community development, according to Swanepoel (1992) and Swanepoel & De Beer (1996) are often not adhered to in income-generating projects, which include the following:

- Human orientation, both physical and abstract human needs such as dignity.
- Participation, making use of local, existing knowledge and experiences.
- Empowerment of communities is seen as cheap labour and not as their democratic right to power and decision making.
- Authority is not transferred by means of ownership.
- Release from poverty and deprivation is not possible due to maintaining *status quo* and not freeing individuals from the trap of poverty.
- Learning by doing creates awareness of objectives to be achieved. Learning must be active in all those involved in development, including all stakeholders such as the community workers.
- Training is not conducted in the community's mother tongue.
- Planning of projects are not adaptive to learning experiences and knowledge gained.
- Complex, non-simplistic projects limit the potential for learning and participation.
- A strong focus on economic empowerment but not enough of a social focus, including social relations, information flow and disaster coping mechanisms.
- Stakeholder obstacles including competition, duplication and unnecessary delays with regard to action.

- Development is not people-centred, incorporating values, support, stability and mental and physical welfare.

These principles are the basics of community development and should be applied in laying the foundation of rural income-generating projects.

2.4.2 Features of community development projects not adhered to

Features of community development include collective action, a needs orientation, objective orientation and action at grass roots level (Swanepoel, 1992). Collective action implies group work and teamwork. Needs identification and orientation should be present to be able to address impediments, but should not be the exclusive focus. A focus on available resources and establishing a livelihoods approach complements needs orientation within projects. Striving towards clear objectives further encourages addressing needs. Community development and income-generating projects often fail when these features are not met.

2.4.3 Outcomes of community development neglected

Swanepoel (1992) emphasised that many community projects, including income-generating projects, end up in disappointment and frustration, when desired outcomes of community development are neglected and not realised. These outcomes include awareness creation for available resources and further development giving rise to continued group activity. Community building for self-reliance and dignity as outcome is not realised and projects fail to demonstrate a significant attitude change regarding individual circumstances.

2.4.4 Other obstacles due to poverty, lack of self-sufficiency and self-reliance

Poverty makes it difficult for individuals to participate in community development efforts (Swanepoel, 1992). Illiteracy, as a direct result of poverty and previous disadvantages due to the apartheid legacy, causes individuals to fear participation and creates a feeling of being unable to contribute to the group discussions.

Customs and traditions are a valuable asset to be applied during development, but also create obstacles when these customs remain static. Dependency is another hindrance, where impoverished individuals often view assistance as the norm. Apathy further causes individuals to lack the desire for change and improvement. This is because they are so used to not having, that they dare not imagine the possibility of positive change.

A number of other obstacles, standing in the way of sustainable development are the lack of basic services and infrastructure, including inappropriate housing, water, drainage and sewage, health facilities and educational opportunities. The reality of unemployment further hampers development as it is inclined to create feelings of desperation and lack of enthusiasm (Swanepoel & De Beer, 1996).

Taking these obstacles into consideration, it is further necessary to distinguish between traditional measures of sustainability and true sustainability indicators. Traditional measures further act as an obstacle for true sustainability, hindering successful income-generating projects.

2.5 CONCLUSION

This chapter provided a comprehensive view on income-generating activities and sustainability. Income-generating activities were emphasised describing concepts such as the livelihoods approach, women's income-generating activities, reviving of traditional skills and the role of micro-finance. This section clearly indicated the importance of income-generating activities in disadvantaged communities to provide an income and job opportunities, otherwise not present due to isolation, lack of infrastructure, and limited skills and training opportunities.

Sustainability was explained thus clarifying the concept of sustainability indicators and the various dimensions of sustainability. Requirements for a sustainability checklist were provided with the aim to provide a foundation for development of specific indicators for income-generating projects established within rural communities. Sustainable indicators aid to track the process by measuring progress within projects and communities. Indicators are established and designed with the help of community members themselves in a participative manner. A

number of methods are applied moving towards sustainability, including education and outreach for awareness, and helping community members at grass roots to understand sustainability indicators. A political will to change has to be present and the approach has to be a bottom up approach. Indicators therefore have to be relevant and useable. The use of resources and carrying capacity, together with the limitations of resources and available capital guides the design of indicators. Linkages have to be established within the community, including environmental, economic and society systems.

Dimensions of sustainability include economic, human, social and cultural, environmental, and institutional and political systems. Each of these dimensions or sustainability factors, for the purpose of this study, was subdivided to be able to build a checklist or sustainability indicators for the "Holding Hands" project (and other similar income-generating projects in South Africa), which will be used as a case study for income-generating projects moving towards sustainability.

Chapter Three will discuss the "Holding Hands" project as a case study.

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CHAPTER 3: ARTICLE – THE IDENTIFICATION OF SUSTAINABILITY FACTORS TO GUIDE INCOME-GENERATING PROJECTS FOR WOMEN IN DISADVANTAGED FARMING COMMUNITIES

This article has been submitted to the Journal of Family Ecology and Consumer Sciences and had been formatted accordingly.

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PERMISSION TO PUBLISH FROM OTHER AUTHORS

We, the co-authors hereby give permission to Liezel van Niekerk to submit this article. The article adheres to the requirements. The research article will be submitted to the Journal of Family Ecology and Consumer Sciences for possible publication.

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TITEL: Die identifikasie van volhoubaarheidsfaktore om inkomste-genererende projekte vir vroue in minderbevoorregte plaasgemeenskappe te lei.

Minderbevoorregte gemeenskappe in landelike areas, veral in die Noordwes Provinsie, vind dit moeilik om addisionele inkomste te genereer. Werksgeleenthede in die areas is skaars en die gemeenskappe is gewoonlik ver verwyder van die naaste groot stede om daar te gaan werk soek. Lede van dié gemeenskappe en veral vroue beskik verder oor lae vlakke van formele opleiding. Om hierdie rede is daar gevind dat die vroue van 'n spesifieke landelike gemeenskap in die Noordwes Provinsie kan baat vind by 'n program wat opleiding verskaf in spesifieke vaardighede, gerig op inkomste-generering.

Die doel van die studie was om die moontlike en nodige faktore te ondersoek wat bydra tot die volhoubaarheid van inkomste-genereringsprojekte. 'n Paar soortgelyke Suid Afrikaanse inkomste-genereringsprojekte is ook geanaliseer om sodoende faktore te bepaal wat bydra tot volhoubaarheid. Verder was die projekte vergelyk met spesifieke kriteria om sodoende die volhoubaarheid daarvan te bepaal. Die "Holding Hands" projek, so deur die vroue betrokke by die projek benaam, is geanaliseer deur gebruik te maak van die kriteria wat uit die literatuur verkry is. Deelnemende aksie navorsing (Participatory Action Research - PAR) is hoofsaaklik as metode gebruik vir die studie binne die "Holding Hands" projek. Vanuit die literatuur is 'n raamwerk opgestel waarvolgens die projekte se volhoubaarheid gemeet is. 'n Kwalitatiewe navorsingsmetode, naamlik informele onderhoude met gemeenskapsprojekleiers is gebruik om die faktore wat tot projekvolhoubaarheid bydra, te bepaal. 'n Kwantitatiewe vraelys is verder aangewend om die projekte met mekaar te vergelyk.

Uitgebreide praktiese bevindings vanuit die "Holding Hands" projek is gemaak na aanleiding van elke stap in die deelnemende aksie navorsingsraamwerk. Die hoofelemente in die raamwerk het beplanning, aksie of implementering, observering, nabetragting en herhalende beplanning ingesluit. Sewe soortgelyke inkomste-genereringsprojekte is ook geïdentifiseer en daar is bevind dat sekere faktore nodig is vir suksesvolle volhoubare projekte. Daar is bevind dat 'n genoegsame en gereelde inkomste nodig is en dat 'n fasiliteerder betrokke moet wees.

Die gevolgtrekkinge wat gemaak is, is dat mense-groei en bemagtiging moet plaasvind en dat lede toegang tot markte en kapitaal moet verkry. Projeklede moet ook oor basiese bemarkingsvaardighede en produkverwante vaardighede beskik. Daar moet

verder 'n ondersteuningsnetwerk wees vir die lede en die moontlikheid om nuwe markte te kan ontgin.

TITLE: The identification of sustainability factors to guide income-generating projects for women in disadvantaged farming communities.

SEARCH WORDS: Income-generation, female farm dwellers, sustainability, participatory action research, "Holding Hands" project, FLAGH programme.

ABSTRACT

Disadvantaged communities in rural areas, particularly in the North West Province, find it problematic to generate additional incomes. Employment opportunities are scarce and the communities are usually geographically far from the nearest big cities, which makes it cumbersome to look for employment there. Members of these communities, in particular the women, have very little education or training. Therefore women of specific rural communities in the North West Province may benefit from a programme that provides training in specific skills, with an aim to generate additional income.

The purpose of this study was to investigate the possible and necessary factors that will assist and add to the sustainability of income-generating projects. A number of South African income-generating projects were analysed to isolate the factors that contribute towards sustainability. These projects were further compared with specific criteria to determine sustainability. The "Holding Hands" project, so named by the participants, was further analysed by making use of the criteria selected from the applicable literature. Participatory Action Research (PAR) was mainly used as method for the study of the "Holding Hands" project. A framework was compiled from literature to measure the sustainability of the project. A qualitative research method, namely informal interviews with community project leaders, was used to determine additional factors that contribute to sustainable development. A quantitative questionnaire was used in addition to compare people with one another.

Extensive practical conclusions resulted from the "Holding Hands" project after each stage of the participatory action research framework. The major elements in this framework included planning, action or implementation, observation, reviewing and continuous planning. Seven similar income-generating projects were identified, and certain essential factors were identified to ensure successful sustainable development. It has also become clear that adequate and regular funding is vital, and that a qualified facilitator should be involved.

It was concluded that people-development and empowerment would have to take place and that members would have to obtain access to markets and capital. Project members would have to be equipped with basic marketing skills and product-related knowledge. A support system or network to enable project members to explore possible new markets would have to be regarded as essential.

INTRODUCTION

1. The result of an intensive research initiative in the North West Province (the Transition, Health and Urbanisation in South Africa (THUSA) study – 1996-1999) by the North-West University, Potchefstroom Campus, in which farm dwellers were identified as a particular vulnerable group in terms of nutrition, physical and mental health (Vorster et al., 2000) gave impetus to the Farm Labour And General Health (FLAGH) programme. A thorough needs assessment was conducted in 2001-2002, in two identified farming communities. As a result thereof an income-generating project for women was designed and implemented (Kruger et al., 2006 and Larney & Venter, 2002:1). This article focuses on the "Holding Hands" project designed for disadvantaged female farm dwellers in the North West Province. The "Holding Hands" project focuses on income-generating activities, applying participatory action research in order to achieve sustainability. The article aims to explore the factors contributing to sustainability of income-generating projects in particular. A number of similar, successful income-generating projects in South Africa were further analysed and compared to establish factors necessary and contributing to sustainability.

PROBLEM STATEMENT

2. According to Wilkins (1998:13), poverty levels in rural areas are of the highest in South Africa, especially among farm workers. Extended families living on farms are often supported either by a pension-income, illness allowances or a salary from one or two farm workers in the family. Female farm dwellers generally have little access to resources, such as credit and other physical resources, including education and training facilities, transport opportunities and land (Du Plessis, 2004:33; Rogerson, 2000:696).

3. Income-generating activities subsequently provide some hope for destitute female farm dwellers. Unfortunately income-generating activities are not an easy option for these female farm dwellers wishing to increase their income. Female farm dwellers in the North West Province particularly experience various difficulties hampering development, such as low levels of formal education, little or no job opportunities, poor infrastructure, isolation, inadequate transport availability and lack of confidence (Kruger et al., 2006). A shortage of business skills and the lack of infrastructure such as transport and training facilities further create difficulties, hindering income-generating

projects to become self-sustainable. The problem this study addressed was the identification and application of sustainability indicators for income-generating projects in farming communities.

AIM AND OBJECTIVES OF THIS STUDY

4. The aim of this study was to investigate the necessary and contributing factors towards sustainable income-generating projects. The objectives included the analyses and comparison of similar South African income-generating projects to determine these factors, including the "Holding Hands" project.

METHODOLOGY

Research setting and study population

5. Initially a qualitative research design was followed, in order to determine the factors contributing to project sustainability. Informal interviews were conducted with 60 community project leaders or facilitators. Literature studies were conducted by using articles, Internet sources and books (primary and secondary sources) to further identify sustainability factors and gain information from various income-generating projects. A quantitative research strategy was introduced to analyse and compare the income-generating projects according to selected criteria obtained from the qualitative study. Structured questionnaires were e-mailed and faxed to acknowledged project facilitators and telephone interviews held with facilitators where needed. The research design was therefore cross-sectional, making use of a number of cases to detect patterns of association. Opportunity and snowball sampling were applied to select the target population.

6. After this initial phase a Participatory Action Research (PAR) model was applied to the "Holding Hands" project in order to incorporate a people-centred approach that focused on available assets and the creation of sustainable livelihoods within communities. The PAR model strongly suggests a participatory approach, where the facilitator guides the participants towards aims and objectives. PAR as a method has been utilised for this study, encouraging participation, cooperation and interactive learning (Bremner & Visser, 1995; Carney et al., 1999; Coudouel & Hentschel, 2000; Moser, 1998; Narayan et al., 2000; Ngobese & Cock, 1995).

7. In 2002, approximately twelve female farm dwellers from two commercial farms in the North West Province were trained in business and sewing skills. The training was presented based on the need for further training indicated in previous skills training interventions. The women received training in basic business skills from a local Non-Government Organisation (NGO), which included product development, marketing, advertising and financial management. The business training was conducted over a period of six weeks. During this time the women learned to work together as a team, to brainstorm, to engage in problem solving and to overcome difficulties. The women were given the opportunity to select a name for their project and chose the name "Holding Hands" project, because they were working together as a team.

8. The next phase in the training for the "Holding Hands" project included practical skills training. The recommendations of the previous skills interventions were followed. The conceptual framework that was followed for the practical training is illustrated in Figure 1.

Place Figure 1 here

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9. The implementation of this framework in the "Holding Hands" project is illustrated in Figure 2. Each of these steps was analysed according to the procedures followed during the practical skills training conducted in the "Holding Hands" project, and will further be described accordingly.

Place Figure 2 here

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10. ***Planning*** The first step in the planning stage was to introduce the community to the project concept, to gain the trust of the women, to create general interest in the project, and to initially ensure ownership (De Vos, 1998:388). The problems and needs of the female farm dwellers were identified at various stages during the planning process. The initial needs assessment conducted in 2001-2002 (Kruger et al., 2006; Larney & Venter, 2002) and the threefold education and training interventions (Botha, 2005; Du Plessis, 2004; Masetloa, 2004) provided valuable and

very appropriate community-related information that could be used during the present planning process. The need for additional skills training aimed at income-generation was identified during these interventions.

11. The next step in the planning process of the project was to select the project management team. The project management team had the responsibility to lead the project and represent the community (Miles, 2004:69). An open invitation was provided to all interested community members to attend the meetings. At this meeting a project management team was selected.

12. Goals and objectives were identified according to the community's needs and interests. The goals and objectives included addressing challenges, but also providing a sustainable answer for continued income-generation for present and future generations through the application of newly acquired skills.

13. A necessary aspect of the planning process was a SWOT analysis. This analysis identified the inherent and possible **s**trengths, **w**eaknesses, **o**pportunities and **t**hreats that could exercise an influence on the project (Table 1).

Place Table 1 here

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14. Deliberation of a marketing strategy for the project followed. This included targeting nearby markets, including Johannesburg, Potchefstroom and Pretoria. The facilitator of the project completed in-depth market research to determine what type of textile and craft products were available and at what prices these products were being sold. According to the findings the product to be manufactured was decided upon, training requirements were determined, and the training manual and other training materials were planned.

15. ***Acting*** Acting is the stage of the PAR process where the planning, which had been conducted, is implemented. A number of data-collection techniques were identified, which included methods such as surveys and participant observations. For the purpose of this study, data were collected by incorporating role-play exercises, informal conversation and participant observations as described by Collins (1999:59-

61) and Schurink (1998:416-417). The data obtained suggested the need for certain levels of skills, creativity, training materials and product development.

16. ***Observing*** Observation within the "Holding Hands" project was conducted by the facilitator, but project team members were also required to observe each other and work closely together. Monitoring and evaluation occurred at various stages of the project. The extent to which goals were achieved, skills development realised, empowerment of the participants achieved, and general benefits of participation assessed was evaluated. Observation leads to the evaluation of actions, which provides the assurance that the project is still on track, and goals and objectives are being met within certain financial constraints.

17. ***Reflecting*** Regular meetings were held to share knowledge and experiences and to present recommendations for project continuation. Role-play situations were staged within a relaxed, non-working environment to explore new marketing techniques and to build on existing business skills. The participants' experiences were, as a result, practically applied to everyday situations.

18. ***Re-planning*** Re-planning is the last stage in the PAR process, but also the first of the next project cycle. Experiences gained and lessons learnt from the "Holding Hands" project, were implemented to re-plan for the next phase in the intervention for sustainability.

RESULTS AND DISCUSSION

19. The results obtained from the analysis of successful income-generating projects in South Africa similar to the "Holding Hands" project will next be given and discussed.

Similar, successful projects in South Africa

20. Originally 60 income-generating projects in South Africa were identified by making use of available literature. This literature included available articles, newspaper clippings, published craft books and Internet sources. The contact details of each of these projects were obtained, including e-mail addresses, fax and telephone numbers. The project facilitators were contacted either via fax, e-mail or telephone to complete a questionnaire based on identified sustainability factors and criteria gathered by means

of an intensive literature review. A number of these projects were quite informal of nature and not easy to reach or had been in existence for only a short time. At the end seven relevant projects were selected, according to similar type of textile crafts and projects that had been in existence for some time, earning a consistent income (Table 2).

Place Table 2 here

21. The results from the comparison indicated that the projects were distributed across five provinces, namely KwaZulu-Natal, Gauteng, North West, Limpopo and the Free State. Only one of the projects, namely Kopanong Craft Centre (5) had between five and eight members. Two of the projects, Tswaraganang (1) and Phakhamani Textiles (2) had between sixteen and twenty members. Four projects, Kaross Workers (3), Thusanang (4), Mogalakwena (6) and Mapula (7) had more than thirty members.

22. Five of the projects (1, 2, 5, 6 and 7) had been in existence for six to ten years, whereas two projects (3 and 4) had been in existence for ten to twenty years. All seven of these projects specialised in beadwork, sewing, embroidery and textiles.

23. All seven projects proved to function with the help of an outside facilitator, responsible for marketing, receiving orders and assisting with the delivery of the orders. From Table 2 it is evident that these project members viewed sustainability differently. All the projects, with the exception of Mogalakwena (6), indicated the component of sustainability as having access to a sufficient and sustainable income as important.

24. The category "successes achieved", revealed a number of advantages of income-generating projects. These included increase in self-confidence, support, networking and income provision. Challenges identified indicate the need for basic elements to be in place to ensure success and sustainability of these projects. These include having access to markets and therefore being able to generate a regular income, having access to start-up capital and being skilled in marketing.

25. A number of factors vital to ensure sustainability of income-generating projects were identified from these studies. These include, *inter alia*,

- a sufficient and sustainable income;
- facilitator assistance (preferably from within the community);
- people growth and empowerment (a social focus);
- access to markets;
- access to start-up capital;
- sufficient marketing skills;
- receiving practical skills training;
- having support and networking opportunities; and
- exploring new markets.

26. A few factors for sustainable income-generating projects that were not found in the above-mentioned projects were identified in literature. These include the following:

- The implementation and design of saving schemes for members to be able to access funding from community banks.
- The development and establishment of members' abilities and competencies with regard to sharing in decision making and focusing on all factors (extended range of factors) that lead to sustainability.

27. The results obtained through the application of the PAR model will again be discussed according to the steps followed.

Planning

28. Different actions taken within this step of the PAR model will be discussed accordingly.

29. ***Problems and needs of community*** According to the needs assessment conducted in 2001-2002 (Kruger et al., 2006; Larney & Venter, 2002:1), and the training and educational interventions (Botha, 2005 and Du Plessis, 2004), it was found that female farm dwellers do not have access to markets, market requirements, -trends and -prices. The results from the participant observations during the business training sessions of this study, confirmed the above statement in that the women from the "Holding Hands" project were not skilled in marketing, product costing and product design.

30. ***Project management team*** During the role-play exercises, informal discussions, observations and other group activities, it was found that a small group of individuals within the group of women would always take the lead, encourage the other members and motivate them. These individuals, without necessarily being appointed, were self-selected to become the project management team. They proved to have gained the trust and respect of the rest of the project members attending the meetings and that they were able to perform the task of a project management team. These individuals also assisted in the negotiation process when conflict arose regarding products or production methods. The project management team was trained and equipped with the necessary skills, knowledge and motivation for the task at hand. This was done mostly during the business training intervention.

31. ***Work breakdown structure, work schedule, SWOT analysis and financial planning*** The work breakdown structure provided a step-by-step listing of all the activities followed. The activities were attached to a start and finish date, together with approximate costs and responsible individuals.

32. The work schedule chart (also called a Gantt chart or network diagram) was designed and implemented for the "Holding Hands" project to be more specific to include activities within the three stages of the intervention (i.e. empowerment, income generation and sustainability).

33. The strengths, weaknesses, opportunities and threats were identified based on the role-play exercises, discussions, observations and group meetings. The SWOT analysis for the "Holding Hands" project was therefore identified as per Table 1. This analysis assisted with the planning process in order to identify areas where more attention and planning were required. Strengths and opportunities also provided a foundation for resource planning and allocation of resources.

34. The final component of the planning process was that of financial planning, including the budget, and how resources would be allocated to achieve project goals and objectives. This process was incorporated within the work breakdown structure.

Acting

35. This phase embraces a variety of steps:

36. ***Data collection*** The pre-training skills test (manufacturing a small hand embroidery bag) was given to the participants to measure the group's ability to be creative and their level of basic skills in needlework. This pre-training skills test provided valuable data towards the re-planning and implementation of the project. The products, which were manufactured, needed finishing touches and the quality was not up to standard. The products were not of a marketable quality and needed much refinement.

37. On completion of the pre-training skills test, the facilitator had the opportunity to identify a number of selected products for production. This was done in accordance with the participants' skills levels and interests. It was important to not only manufacture a product addressing market needs, but also a product that interested the participants. A denim apron was selected due to the ease of construction and the minimum skills required for its production. The material chosen (heavy denim fabric) was affordable and would not readily show mistakes.

38. ***Categorise data into themes*** From the data collected during group meetings and practical business training, a number of themes were identified, namely:

- Need for constant business training with follow-up training, and monitoring and evaluation thereof.
- Practical skills training for various products, for new members and when new products are being introduced.
- Need for a facilitator from within the community - to be trained.
- Desire and need to generate a sustainable income from product sales.
- The need to address project sustainability during all phases of production.
- Introduction and design of sustainability indicators to measure progress and level of sustainability for present and future generations.

39. ***Further training*** Based on the level of skills of the participants, the type of product selected and the identification of the above themes, the categories identified for training included pattern making, cutting, embroidery, sewing, machine maintenance, quality control and finishing and packing.

40. Pattern-making training themes within the pattern-making category included determining the rating of fabric usage per product item, and reading pattern information

and determining fabric grain direction. Other themes included the creation of markers for multiple products and optimal fabric usage, and making certain that pattern pieces were complete (compared to the sample/diagram provided.)

41. During this part of the training it was found that the participants still lacked basic mathematical skills to be able to construct and alter patterns. The women were not able to calculate measurements and read a tape measure for determining ratings. A certain woman was identified (she displayed the interest as well as a natural talent for pattern making) for further and continued training while production was in progress. Presenting additional training during production of the items ensured fast, practical and effective learning.

42. During the training to improve cutting, skills such as accuracy, placement of pattern pieces and quality inspections of fabric, were transferred to the women. Bundling of cut pattern pieces into complete products was further included in the training. It was found that the skills of the women would only improve with practical experience and time. The women were therefore given ample opportunity and guidance to practise these newly acquired skills.

43. Only two of the women in the group had prior experience of machine sewing. It was hence necessary to include training from a very basic level such as threading of the sewing machines, straight stitching and curve stitching. Mastering these basic skills was set as a prerequisite and none of the women was allowed to proceed to the next level if satisfactory results with these skills had not been accomplished. Some of the women did not possess the necessary hand-and-eye coordination to be able to sew in a straight line. These women were given the opportunity to continue practising and continually received guidance from the facilitator. After some time, the women who did not naturally possess or readily attain competencies and skills associated with machine sewing could fortunately be moved to other areas of activity which suited them better and from which they could choose, e.g. embroidery, adding finishing touches and packing, all of which are essential tasks if the product is to be marketed.

44. Continued practice was required to ensure improvement in skills and quality. A focal point of the sewing training was to emphasise the importance of immediately correcting mistakes when they were made. Each person was responsible for correcting her own mistakes. The women worked as a team and would often apply a system of part production, where each person completed a section of the product. The women

would therefore apply an internal in-line quality inspection, by checking each other's work, and sending faulty items back to the person to rectify the mistakes.

45. A strong emphasis was placed on quality control at all stages of production. Quality control included in-line and final quality checks at the end of the production line. The importance of quality control was highlighted due to the value customers place on quality products. The quality of the products was at first not of a high standard, but with time (approximately six months after the first training had been initiated) the women were able to produce a better quality product. Original samples constantly aided with quality control, and provided a standard against which newly manufactured products could be measured.

46. The last stage of the production process, finishing and packing, included training in clipping excess threads from the products, pressing the products and packing the product in a uniform manner. At first the women did not understand the importance of neat, uniform packing and the training proved to be challenging. The women did not have experience as to the markets they were serving and were given the task to evaluate packing of items in stores whenever they visited the nearby towns and only then did they start to understand the importance of neat, uniform packing.

47. ***Negotiation and establishing ownership*** Administrative and marketing skills were re-emphasised during the training in order to ensure that the participants realised the importance of project ownership. Administrative skills included order tracking, production line planning, keeping due dates for order delivery, ensuring that correct quantities were being cut and monitoring the budget. Marketing skills included the ability to observe market trends with relation to similar products sold in stores frequently visited by the women. The women, after returning from visits to nearby towns, identified alternative products and fabrics that could be used according to the needs expressed by these markets. In doing so, the women therefore also identified additional market opportunities and possible new customers. The results of the training during this section ensured that three of the women took the responsibility to perform market analysis on a more regular basis. They showed interest, had the ability to take charge, and managed to ensure that the project was still running smoothly even when the facilitator was not present. These women also performed the tasks of negotiation with, and motivation of, the rest of the group.

48. After training in negotiation and taking ownership had been completed, it became evident that small group dynamics and processes are imperative for the community to take ownership of the entire process. In doing so the women were empowered and felt responsible for their own project and development.

Observing

49. At the start, middle and end of each training session participant observations were conducted. This was used to guide the facilitator and participants to achieve goals and objectives and to encourage life-long learning, which would ensure sustainability. For this reason, the acting and implementation phase, as well as the observation phase often ran concurrently.

50. ***Monitoring and evaluation of participants*** Through constant monitoring and evaluation a number of recurring findings during each training phase were revealed. These included the following:

- The need for continued practical demonstrations at all times.
- Skills levels of participants always proving to be lower than anticipated.
- Attention span of adult learners very short, therefore sessions should be kept brief, interesting and practical with regular breaks.
- Different ideas and resulting expectations brought from outside into the training sessions by participants themselves, thus positively influencing the level of motivation to learn the new tasks at hand.
- Participants indicated different interests and aptitudes and at times found it difficult to learn new skills.
- Experiences brought to the table were valuable and provided an opportunity for learning (interesting and welcome!) by which both the rest of the group and the facilitator could benefit.

These results and findings can be of practical assistance when considering and constructing a base for future training.

51. ***Evaluate the action plan*** The training material as well as the manner in which the skills training was presented, also underwent evaluation to determine whether time frames were achieved and cost-implications were met. It was found that a

six-week basic business training was not sufficient for effectively transferring the much-needed skills required for income-generation. Restricted expenditure possibilities and time limitations proved to be important elements to take into account and keep proper record of when embarking on a training programme like this. Initial assessment of participants' existing skills (or absence of skills) must be done. According to present findings the participants exhibited a limited range of accomplished skills and similar circumstances might be true for most of the rural or remote rural areas. It would, therefore, be both necessary and profitable to run an extensive training programme during production - a programme that should endeavour to be as practical and job-related as possible. Due to the constraints mentioned in this paragraph, launching a training programme during the production of products for income-generation would prove to be a challenge, but would, on the other hand, also not go by without its favourable rewards.

Reflecting

52. Participative, reflective experiences within the project helped the women to grow and re-plan. Reflection and informal discussions combined in an excellent exercise to improve the women's self-confidence. The reflection phase included sharing of experiences and knowledge, while reflecting on possible recommendations for future training. The participants mostly did this during group meetings, role-play exercises and informal sessions such as tea breaks. Opportunities were given to the participants to speak freely in a relaxed environment regarding their experiences, both during training and manufacturing of products. Creative ideas for new products as well as areas where additional training would be required were raised. The women identified the need to learn how to manufacture additional products, based on the market research they conducted and also because the women wanted to extend their skills base.

Re-planning

53. During the re-planning phase the recommendations and results were taken into consideration in order to plan for a new intervention such as the introduction of new products. Introduction of new products would involve additional skills training. New members joining the "Holding Hands" project would also be identified for additional training.

54. Recommendations included the need for start-up capital, business training, exploration of existing markets and discovering of new markets.

CONCLUSION

55. The "Holding Hands" project was initiated with the aim to empower female farm dwellers to generate an income and it consequently had a strong social focus. As the project progressed, it became evident that this aim could not be achieved without including business orientations and principles. Income-generation goes hand in hand with business practices and therefore a fine distinction had to be made between social empowerment and business strategies. The sustainability of the project required continued training and re-training of both new and old members. The project cycles as a result, had to include social empowerment, business and skills training for new members, while existing members at the same time had to receive re-training and alternative/extended training in new products and business concepts. From the analyses of the studies it can be recommended that start-up capital, business training, exploring of existing markets and finding new ones are necessary to ensure sustainability.

56. The analysis of the "Holding Hands" project revealed that a few general recommendations could be made specifically applicable to communities displaying relevant poverty, poorly developed levels of education and limited exposure to external development such as the female farm dwellers that had formed part of the research project and of which there are many across the country. The recommendations would, *inter alia*, include the following:

- Practical pattern making skills training revealed the lack of mathematical skills. It was therefore recommended that interested women undergo basic, task-orientated mathematical training. The training would make it easier for women to construct basic patterns and to be able to alter patterns.
- Transferring of pictures to the fabric during the embroidery phase, was identified as a stumbling block and therefore it is recommended for present and future "Holding Hands" members to receive additional training in transferring pictures to the fabric and to practise the skill regularly. These exercises would improve art skills and creativity.
- All the skills acquired during the practical skills training are skills that need to be developed continuously and it is therefore recommended that participants

practise these newly acquired skills as often as possible, with the help of a facilitator where needed.

- Based on findings while presenting the section of training pertaining to the maintenance of a machine it serves to recommend that a full-time technician from the community be trained to assist women with more complicated tasks when machines do not function optimally.
- A facilitator from the community, preferably already well-trained in basic project-related requirements, has to be trained in order to guide the project team and provide training to new members. The project members would then to an increasing degree start to rely less and less on the researcher, or any researcher in future, for that matter. The recruited facilitator would furthermore receive intensive training in business skills to make crucial market-related decisions where necessary and would emerge being better equipped to do so with confidence and favourable results.

TABLE 1: SWOT ANALYSIS CONDUCTED FOR THE "HOLDING HANDS" PROJECT

STRENGTHS	**WEAKNESSES**
-Empowerment -Training and education -Increased self-worth and confidence -Improved living conditions -Increased general well-being -Optimal use of available resources -Creative thinking and self-motivation -Improved decision-making skills -Unlocking problem solving potential -Improved communication skills	-Poor infrastructure -Little formal education to build on -Negative attitudes -Transport limitations -Isolation -Inability to understand markets - Inability of community to function independently -Inability of community members to work as a team
OPPORTUNITIES	**THREATS**
-Sustainable income-generation -Creating job opportunities -Nearby communities are also involved and empowered	-Shortage of funds -Time limitations -Lack of interest from relevant role-players

TABLE 2: SUCCESSFUL, SIMILAR INCOME-GENERATING PROJECTS IN SOUTH AFRICA (Appendix 3)

	Sustainability factors/criteria								
Project name	**1. Location of group**	**2. Size of group**	**3. No. of years in existence**	**4. Type of craft**	**5. Outside facilitator**	**6. Meaning of sustainability**	**7. Successes**	**8. Challenges**	**9. Recommendations**
1.Tswaraganang	3	5	2	1,2	1	3-5	5-8	1,2,6 -9	3, 7
2. Phakamani Textiles	1	5	2	4	1	2,3	2,7	11	7
3. Kaross Workers	7	7	3	3,4	1	2,3	2,6	11	7
4. Thusanang Development and Training	9	7	3	2-4	1	1-3	1,2,4 -6	11	7
5. Kopanong Craft Centre	4	2	2	1	1	1-3	2	1-4	8
6. Mogalakwena Craft Village	7	7	2	1-3	1	3	2,4,7	3	1
7. Mapula Embroidery	3/4	7	2	2,3	1	2,4,5	2,5,6	10	3,7

Key:

1. Location of group:

1 – KwaZulu Natal Province

2 – Mpumalanga Province

3 – Gauteng

4 – North West Province

5 – Western Cape Province

6 – Northern Cape Province

7 – Limpopo Province

8 – Eastern Cape Province

9 – Free State Province

2. Size of group:

1: <5

2: 5-8

3: 9-12

4: 13-15

5:16-20

6: 20-30

7: >30

3. No. of years in existence:

1: 1-5 years

2: 6-10 years

3: 10-20 years

4. Type of craft:

1 – Beadwork

2 – Sewing of clothing and furnishings

3 – Embroidery

4 – Textiles

5. Outside facilitator:

1 – Yes

2 – No

3 – N/A

6. Meaning of sustainability:

1 – Ownership transferred

2 – Sufficient and sustainable income

3 – People growth an empowerment

4 – Exposure

5 – Exports

7. Successes:

1 – Given a reason to live

2 – Provided with an income

3 – Help time pass

4 – Networking

5 – Support

6 – Recognition and support

7 – Courage and independence

8 – Increase in self-confidence and self-worth

8. Challenges:

1 – Lack of access to markets

2 – Lack of sufficient income

3 – Lack of start-up capital

4 – Lack of proper quality systems

5 – Low levels of motivation

6 – Difficulty in obtaining raw materials

7 – Lack of sufficient income

8 – Lack of skills for accurate product costing

9 – Lack of transparency, jealousy and inequality amongst members

10 – Lack of marketing skills

11 – Did not experience any challenges

9. Recommendations:

1 – Require start-up capital

2 – Practical skills training

3 – Business training

4 – Community banks / financial intermediaries

5 – Realistic savings schemes

6 – Participate in decision-making

7 – Existing markets explored and new ones found

8 – None

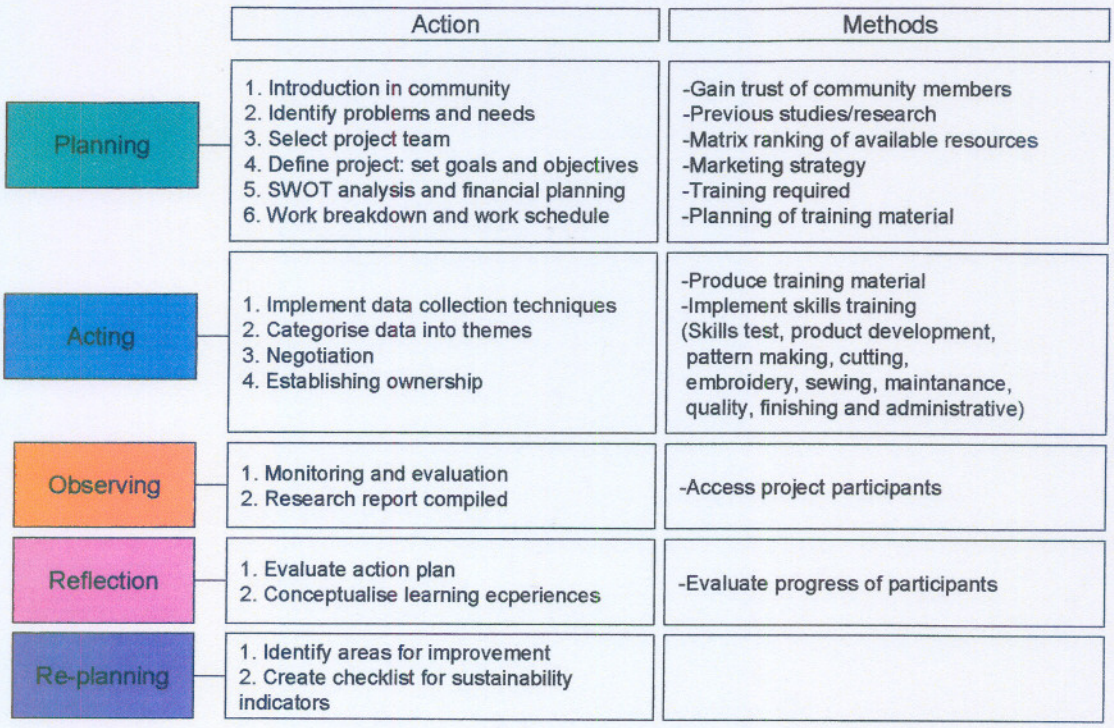

FIGURE 1: CONCEPTUAL FRAMEWORK FOLLOWED IN THE "HOLDING HANDS" PROJECT (ADAPTED FROM BLESS & HIGSON-SMITH, 2000; COLLINS, 1999; KAHN, 1994; McNICOLL, 1999; McTAGGART, 1989; MILES, 2004; MORSE, 1997; SCHURINK, 1998; VAN ROOYEN, 1998; WHYTE *et al.*, 1989 and WYSOCKI et *al.*, 2000).

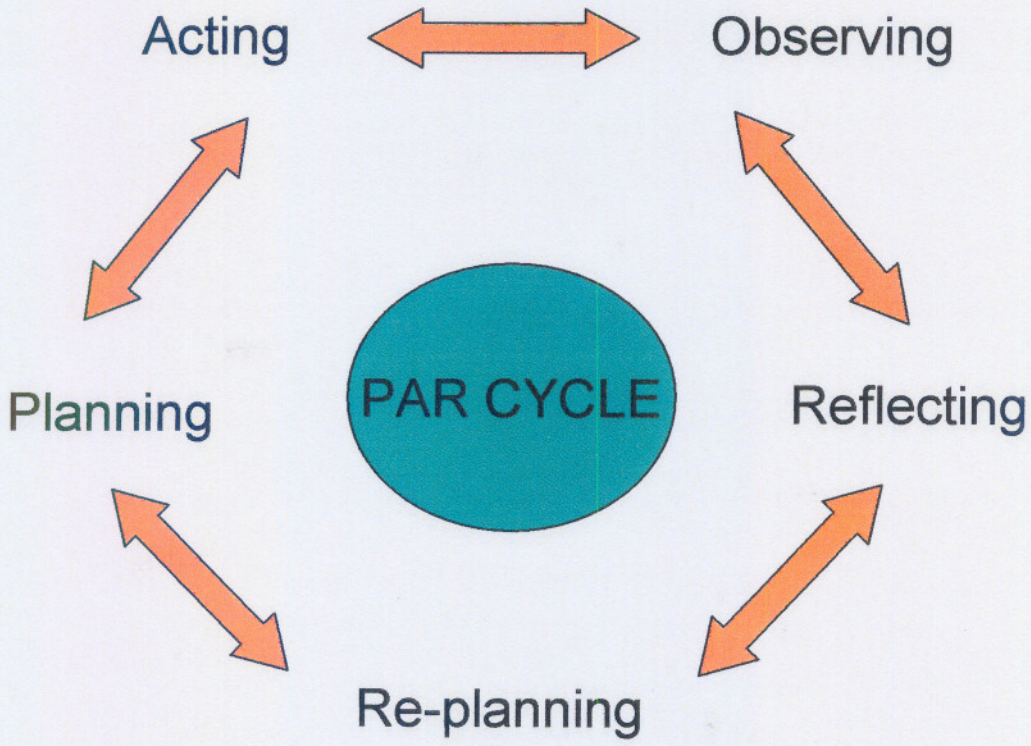

FIGURE 2: THE PAR PROCESS IMPLEMENTED IN THE "HOLDING HANDS" PROJECT (ADAPTED FROM McTAGGART, 1989).

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CHAPTER 4: DISCUSSION OF THE DEVELOPMENT OF SUSTAINABILITY INDICATORS APPLICABLE TO WOMEN'S INCOME-GENERATING ACTIVITIES IN A DISADVANTAGED FARMING COMMUNITY

4.1 INTRODUCTION

Income-generating projects in disadvantaged farming communities provide an income and other opportunities, such as networking, recognition and building of self-confidence in destitute women. These women face various difficulties such as lack of education, poor infrastructure, isolation and few income opportunities (Kruger *et al.,* 2006). Often these difficulties are the very aspects standing in the way of successful income-generating projects and community development in general (Swanepoel, 1997).

Sustainable income-generating projects and -communities require a long-term vision, considering the carrying capacity of resources and establishing linkages and networks. Sustainability of income-generating projects is subsequently essential for both present and future generations, not only to provide a regular income for community members, but also to secure livelihoods. Resources applied in daily- and income-generating activities should be evaluated and regularly monitored to maintain a balance between the three dimensions of sustainability, namely the environment, society and the economical situation within a community. Sustainability indicators integrate these dimensions and measure progress, explain sustainability, educate the community, point out possible links, motivate and focus on action to be taken (Hart, 1998:94).

This chapter will provide a practical outlook on integrating the dimensions of sustainability by establishing a set of sustainability indicators. Dimensions of sustainability relate to the various spheres community encompasses, and indicators, the measures of sustainability. These indicators have been designed and applied to the "Holding Hands" income-generating project in the North West Province, Rysmierbult area. Chapter Three, the research article, preceded this chapter due to the importance of implementing a participative research environment with regard to income-generating projects *en route* to sustainability. Participatory Action Research (PAR), discussed in Chapter Three, therefore created the

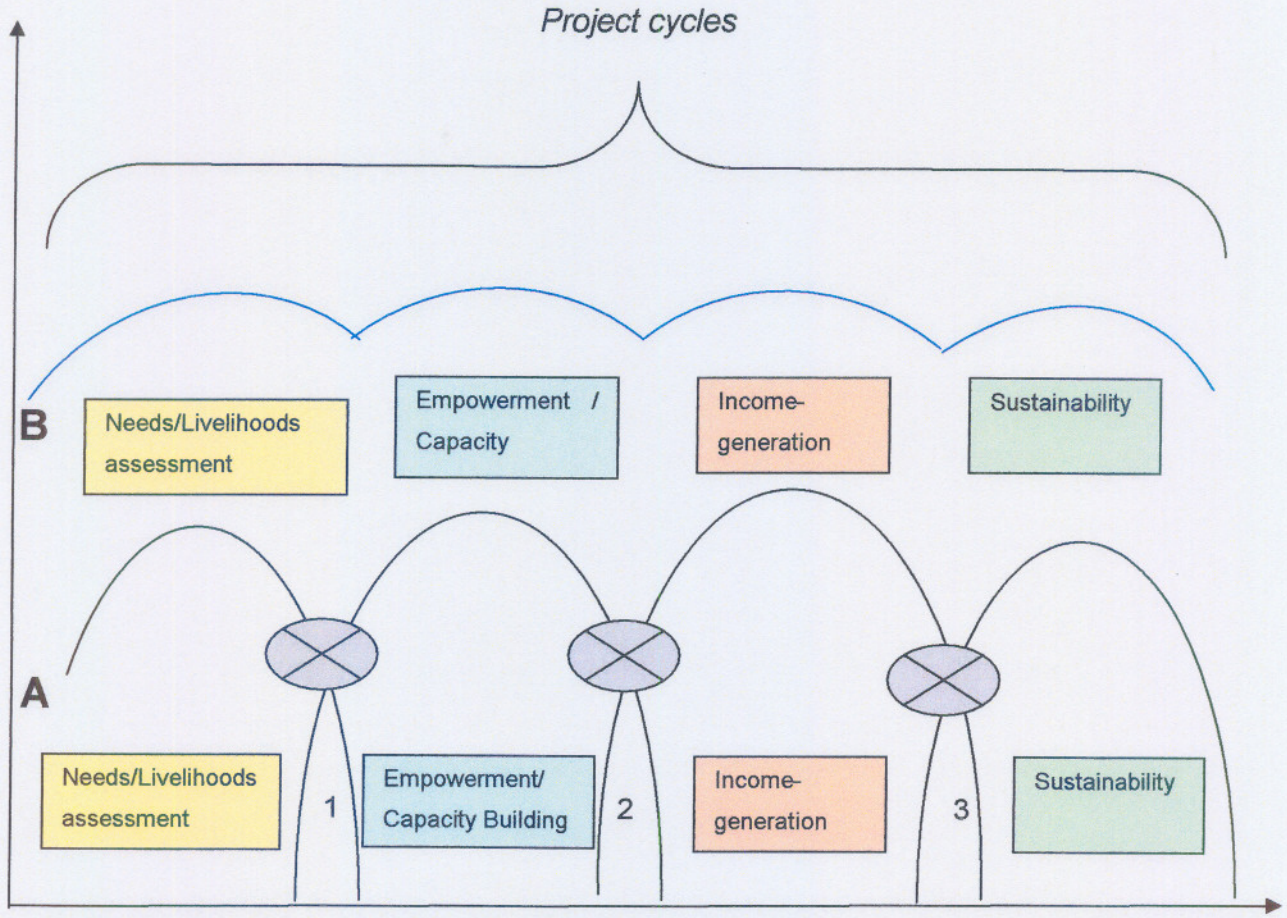
foundation for this chapter. It is further possible to argue that PAR should consequently be listed as an indicator for sustainability. It was moreover vital to establish the factors contributing to sustainability, prior to compiling the sustainability checklist.

Traditional measures or indicators of sustainability are addressed in Chapter Two to point out the difference between planning for true sustainability, using all three dimensions of sustainability. Attention is given to obstacles and challenges identified in literature, which could hinder the success and sustainability of income-generating projects.

True sustainability indicators are measures of sustainability for present and future generations. Indicators should be quantifiable pointing to a specific issue, or how well a system works (Hart, 2000a:1; Hart, 2000b:1-2). The following section provides a practical view on true sustainability indicators based on the "Holding Hands" project. The various project phases of needs and livelihoods assessment, empowerment and capacity building, income-generation and sustainability will be highlighted.

4.2 TRADITIONAL MEASURES OF SUSTAINABILITY VS. TRUE SUSTAINABILITY INDICATORS

Traditional measures or indicators of sustainability consider communities in separate spheres of environment, society and economy. Projects are therefore designed independently from each other, thus not taking into account the possible linkages between these dimensions. Traditional indicators would for example measure the amount of money generated in the community or the employment rate is calculated to establish the level of sustainability. True sustainability indicators would rather take into consideration whether the skills training within a community is relevant for the available jobs. Training programmes would then be implemented to fill the skills gap and market need. At the same time available resources, from the environment and society, will be allocated to optimise the benefits from the training interventions.



Key:

⊗ = Indicates the positions where separate projects should be integrated with the next, for a more sustainable approach, incorporating all dimensions of a community

A = Traditional measures of sustainability

B = True sustainability indicators

1, 2, 3 = Indicating various crossing points from one project to another

Figure 4.1: Project cycles – traditional vs. sustainable indicators (adapted from De Satgé, 2000; De Vos, 1998 and Hart, 1998).

The fundamental difference between traditional indicators and true sustainability indicators is further pointed out by means of indicating the various project cycles involved in income-generating projects and development activities (Figure 4.1). The project cycles include a needs and livelihoods assessment, empowerment and capacity building, income-generation and sustainability. Project cycles "A" in the figure indicate the traditional indicators of sustainability, where each project

functions separately from the other. Each project therefore has a start and finish date.

Areas 1, 2 and 3 in these project cycles indicate the point where each project should be flowing into the next to be able to generate true sustainability indicators. Position "B" indicates a relationship between the project cycles and dimensions of sustainability, almost becoming one continuous programme. Separate projects as a result, become more integrated, leading to the design of true sustainability indicators.

4.3 SUSTAINABILITY INDICATORS AND THE "HOLDING HANDS" PROJECT

Sustainability indicators address carrying capacity of resources within a community and should be relevant and understandable to the entire community involved. Indicators should have a long-term focus of twenty-five to fifty years and should be able to designate linkages between the various dimensions of sustainability (Hart, 1998:98). Indicators have no purpose if they are not used to indicate progress or to highlight possible problems in time to rectify and adjust planning.

Hart (1998:147-149) identified the following guidelines for designing practical sustainability indicators:

- Define the goals and objectives of the programme, focussing on the visible end result.
- Identify links within the community and the various sustainability dimensions.
- Identify the types of capital and resources involved and the pressures on these resources.
- Various indicators should be brainstormed, whether they are relevant or not.
- Evaluate the indicators and rank according to relevance and importance.
- Identify data sources for obtaining information, including local and regional sources and also previous research conducted within the community.
- Identify ways in which the indicators could benefit the community and how the individual members can become part of this strategy for sustainability.

By making use of these guidelines a set of indicators has been developed for the "Holding Hands" project and will be discussed in the next section.

4.3.1 Sustainability indicators identified within the "Holding Hands" project

The community where the "Holding Hands" project was established has been identified as a community with a lack of infrastructure, low level of education, and limited access to income and job opportunities (Kruger *et al.*, 2006). Available resources within the community were not utilised, community members were isolated and experienced a general lack of self-confidence. The goal and objective of the "Holding Hands" project as a result was to establish sustainable opportunities for income-generation and to utilise resources to establish livelihood strategies. To achieve these goals it was necessary to design a set of sustainable indicators to measure progress and develop a plan of action for future generations. These indicators were developed for the "Holding Hands" project as per Table 4.1 taking into consideration the situation analysis of the community (Hart, 1998:147-149).

The first column of the table represented the specific indicators identified during participative community meetings. The next column gave attention to the types of indicators, classified into pressure, state or response indicators. State indicators are actual situations and needs that exist within the community. Pressure indicators on the other hand are those indicators involving activities causing the state. Response indicators comprises of the actions to change and influence the state (Hart, 1998:126). The types of capital involved with every indicator were allocated either to social, natural and financial capital.

The ranking of sustainability indicators in columns four and five of Table 4.1 addressed the relevancy of each indicator in categories of carrying capacity, whether the indicator was understandable, whether it incorporated a long-term view and whether linkages were established with other dimensions of sustainability (Hart, 1998:156). It was further important to ask the question whether the indicator would not compromise global sustainability. If the answer was positive ("yes"), the indicator was automatically disqualified.

The carrying capacity of resources was broken down into natural resources (environmental - 3 points), social resources (society - 2 points), and financial resources (economical - 1 point). If the indicator was understandable one point was allocated and if a long-term view was taken, another point was allocated. Linkages that were identified carried a maximum of seven points. Linkages were classified as areas where indicators in one dimension of sustainability corresponded and directly linked up with another dimension. Income generation, for instance, and the allocation of income in the household have a financial link, but also a social link due to improvement of social status and other factors. A total of fifteen points could therefore be allocated per indicator.

Table 4.1 Sustainability indicators identified for the needs- and livelihoods assessment phase in the "Holding Hands" project (adapted from Hart, 1998).

Indicator description (Random order)	Type of indicator	Type of capital	Total Rank	Rank breakdown	
Number of women generating an income, whether formal or informal	State	Financial (Built capital)	9/15	Financial carrying capacity	1
				Understandable	1
				Long-term view	1
				Linkages	6
Available skills for income-generating activities	Response	Social	10/15	Social carrying capacity	2
				Understandable	1
				Long-term view	1
				Linkages	6
What are the education and training opportunities available	Response	Social	11/15	Social carrying capacity	2
				Understandable	1
				Long-term view	1
				Linkages	7
Transport opportunities available to markets to sell products	Pressure	Financial (Built capital)	8/15	Financial carrying capacity	1
				Understandable	1
				Long-term view	1
				Linkages	5

Indicator description (Random order)	Type of indicator	Type of capital	Total Rank	Rank breakdown	
Community interests (traditional)	Response	Social/ Human	9/15	Social carrying capacity	2
				Understandable	1
				Long-term view	1
				Linkages	5
Does social networks exist within the community	Response	Social	10/15	Social carrying capacity	2
				Understandable	1
				Long-term view	1
				Linkages	6
Can marketing and business skills be improved	Response	Social/ Human	11/15	Social carrying capacity	2
				Understandable	1
				Long-term view	1
				Linkages	7
Productive capacity of community (health)	Pressure	Social	10/15	Social carrying capacity	2
				Understandable	1
				Long-term view	1
				Linkages	6
Are the women able to be innovative and creative	Response	Social	9/15	Social carrying capacity	2
				Understandable	1
				Long-term view	1
				Linkages	5
What support structures exist for child care during working hours	State	Social	9/15	Social carrying capacity	2
				Understandable	1
				Long-term view	1
				Linkages	5
Other institutions that provide support: religious and cultural	State	Social	11/15	Social carrying capacity	2
				Understandable	1
				Long-term view	1
				Linkages	7
Internet and telephone facilities for sales and marketing	State	Financial (Built capital)	8/15	Financial carrying capacity	1
				Understandable	1
				Long-term view	1
				Linkages	5

Indicator description (Random order)	Type of indicator	Type of capital	Total Rank	Rank breakdown	
Savings opportunities	Response	Financial	9/15	Financial carrying capacity	1
				Understandable	1
				Long-term view	1
				Linkages	6
Sources of credit	Response	Financial	8/15	Financial carrying capacity	1
				Understandable	1
				Long-term view	1
				Linkages	5
Other sources of income	State	Financial	7/15	Financial carrying capacity	1
				Understandable	1
				Long-term view	1
				Linkages	4
When would re-training be necessary	Response	Social	10/15	Social carrying capacity	2
				Understandable	1
				Long-term view	1
				Linkages	6
Should new products be introduced	Response	Financial	7/15	Financial carrying capacity	1
				Understandable	1
				Long-term view	1
				Linkages	4
Is skills assessment in place (for re-training purposes)	Response	Social	11/15	Social carrying capacity	2
				Understandable	1
				Long-term view	1
				Linkages	7
Skills evaluation for new members	Response	Social	10/15	Social carrying capacity	2
				Understandable	1
				Long-term view	1
				Linkages	6

4.3.2 Ranking of sustainability indicators for relevancy

The next step, according to Hart (1998:156), would be to rank the indicators in a new table from the highest score (most relevant) to those indicators that scored lowest. Irrelevant indicators could then be eliminated if needed. A score of seven out of eleven was identified as the cut-off for relevancy.

The indicators seemed all relevant, scoring fairly high. According to the list, education and training would remain an issue of the highest importance, together with marketing and business skills training.

Table 4.2: Ranking of sustainability indicators based on the identified indicators for the "Holding Hands" project in table 4.1 (adapted from Hart, 1998).

No.	Indicator	Ranking
1	Education and training opportunities	11/15
2	Marketing and business skills improved	11/15
3	Other institutions provide religious and cultural support	11/15
4	Skills assessments conducted for re-training purposes	11/15
5	Available skills for income-generating activities	10/15
6	The existence of social networks	10/15
7	Productive capacity of women (health)	10/15
8	When re-training would be necessary	10/15
9	Skills evaluations for new members	10/15
10	Number of women generating an income	9/15
11	Community interests (traditional skills)	9/15
12	Innovative and creativeness of the women	9/15
13	Support structures for child care	9/15
14	Savings opportunities	9/15
15	Transport opportunities to markets	8/15
16	Internet and telephone facilities	8/15
17	Sources of credit	8/15
18	Other sources of income	7/15
19	Introduce new products	7/15

4.3.3 Data sources and implementation of indicators in the daily activities of the "Holding Hands" project

Hart's (1998:156) guidelines for the development of indicators also recommended allocating data sources for information gathering. The "Holding Hands" project gathered relevant data from university research conducted in the local community (Botha, 2005; Du Plessis, 2004; Kruger *et al.*, 2006; Larney & Venter, 2002; Masetloa, 2004) and the application of other research techniques, for example: observations, informal conversation and role-play exercises facilitated by the researcher. These indicators were implemented in the daily activities of the "Holding Hands" project during production for income-generation. The implementation of the indicators further took shape during informal conversation throughout tea times and other social opportunities. These informal discussions provided opportunity for reflection, sharing of experiences and constantly evaluating the relevance of the selected indicators.

The following section of the chapter focuses on the sustainability checklist that was compiled to be applied and utilised in the "Holding Hands" project. The checklist was implemented in conjunction with the identified sustainability indicators.

4.4 PROJECT SUSTAINABILITY CHECKLIST

The sustainability checklist designed for the "Holding Hands" project addressed the four key areas within an entire development programme for income-generation. These key areas, previously identified in Section 4, included a needs and livelihoods assessment, empowerment and capacity building, income-generation and production and sustainability. Figure 4.2 indicates the interrelationship between these four areas of development for sustainability and further provides a schematic view of the steps that were followed to develop a checklist for sustainability.

The needs and livelihoods assessment phase included components such as reviving and re-discovering traditional skills, arranging community meetings, conducting market analysis, completing skills assessment, identifying needs and determining what the available resources were. Each of these components will be discussed individually in Section 4.4.1. The next key area (covered in Section 4.4.2) was that of empowerment and capacity building, which included overcoming of

challenges, conducting training and education, establishing livelihood strategies and completing evaluation. The income-generation and production phase followed the empowerment and capacity building phase, where training and education were applied to improve the well-being of individuals and communities. Income generation included activities such as a focus on strong business orientation and less on empowerment. Maintenance of resources, product development, building of networks and encouraging collaborative action and improving production systems were also part of the income-generation phase.

A strong interrelationship exists between the needs and livelihoods assessment, empowerment and income-generation. During the income-generation phase, skills learnt in the empowerment and capacity building phase were applied. If certain individuals had proved to lack skills in certain areas of the production process, they had to receive additional training. The same applied to the needs and livelihoods assessment. If, for some reason, during the production phase the facilitator observed a lack of motivation, it was necessary to determine the root of the problem.

Resources were not adequate to meet production needs and individuals as a result felt de-motivated and unable to achieve production targets. When problems such as these occurred the facilitator, together with the "Holding Hands" members, needed to investigate the possible causes of these phenomena. Returning to the needs and livelihoods assessment phase to re-plan and investigate provided answers and solutions for these types of challenges. This had to be done in a participative manner, including all programme and community stakeholders. The income-generation and production phase will consequently be discussed in Section 4.4.3.

Sustainability was the last phase of the sustainability checklist design, aimed at development and income-generation (see Section 4.4.4). Key components identified in the sustainability phase included facilitator training for members from within the community, encouraging further development of members and identification and development of additional skills areas required. Other components included re-evaluation of livelihood strategies and resources; training and empowerment of new group members and training when new products were introduced.

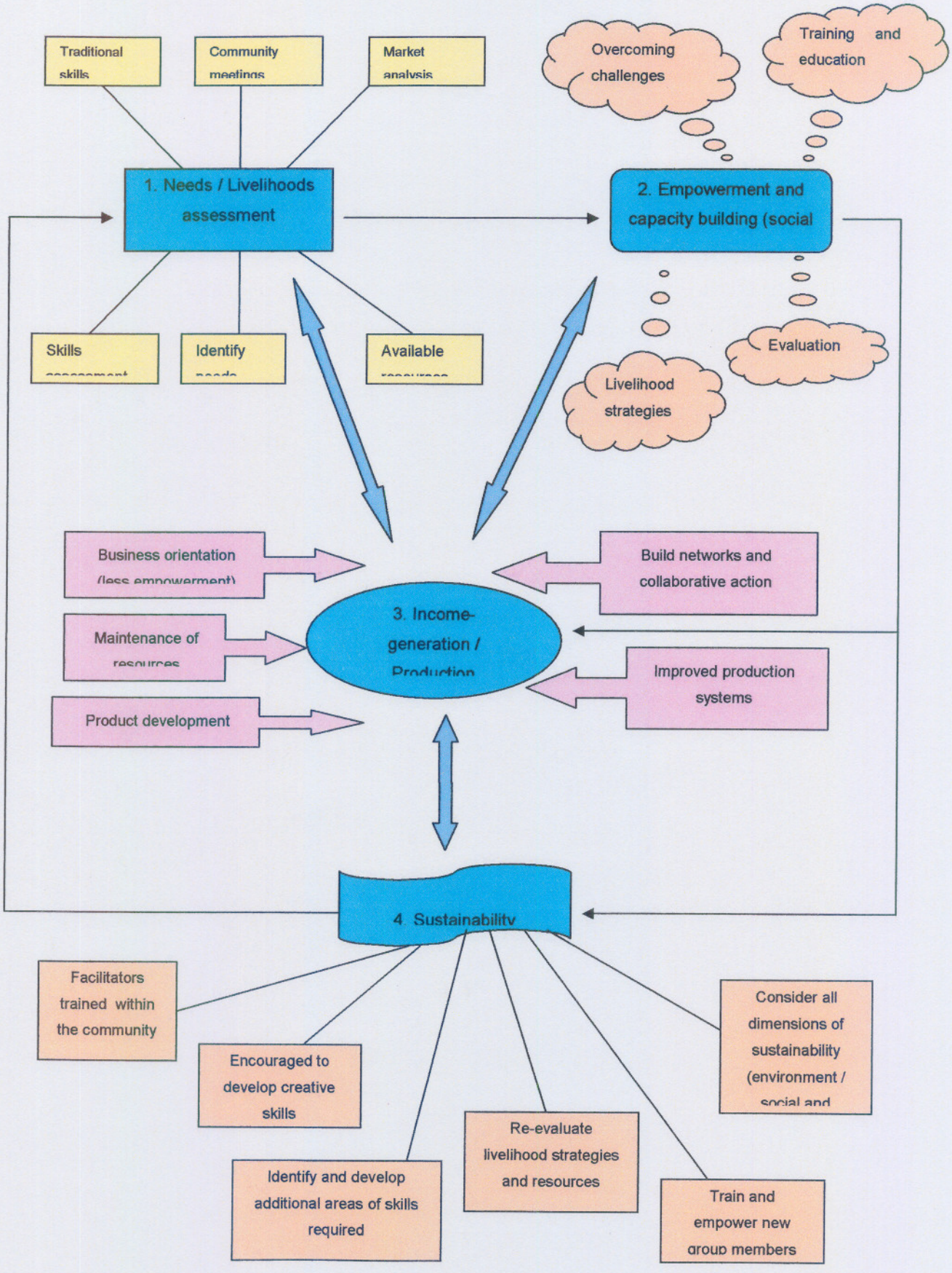


Figure 4.2: Schematic view of the steps involved when designing a sustainability checklist (adapted from De Satgé, 2002; Wasserman & Kriel, 1997; Weyers, 2001).

4.4.1 Needs and livelihoods assessment

Needs assessments traditionally focus on resources communities do not have access to; whereas livelihoods assessments focus on resources communities have access to. Rogers (1977) highlighted that needs and livelihoods assessments have to be participative and people-centred. It was therefore assumed that human beings are trustworthy and able to make their own decisions regarding their own circumstances. Freire (1972) believed people to be knowledgeable and capable, through critical reflection regarding experiences and circumstances. Reflection should include listening, hearing, seeing and experiencing, through dialogue and self-reflection. Chambers (1983) also indicated the importance of learning from rural communities during the needs and livelihoods assessment, the importance of understanding their knowledge system and of trying to experience the world from their perspective.

The needs and livelihoods assessment was therefore the first phase for designing and planning a checklist for sustainability implemented in the "Holding Hands" project. Wasserman & Kriel (1997:27) identified themes for information regarding a specific community and that had to be gathered prior to the needs and livelihoods assessment phase. This was done during a situation analysis. These themes included the history and origin of the community, physical characteristics, demographic data, resources, infrastructure, economic structures, political circumstances and communication networks. For the purpose of this study the situation analysis will not be discussed, due to previous research that had been conducted and documented within the specific community (Botha, 2005; Du Plessis, 2004; Kruger *et al.,* 2006; Larney & Venter, 2002; Masetloa, 2004; Vorster *et al.*, 2000).

Methods applied to conduct the needs and livelihoods assessment included taking community traditional skills and indigenous knowledge into consideration for planning. Community meetings and market analysis were conducted, organising skills assessments and identifying needs of all community members. Identification of available resources and utilisation of matrix rankings were also implemented. Matrix rankings aided in decision making and analysis of available resources.

These methods will be discussed briefly, as they relate to the "Holding Hands" project.

- *Identify needs of the community*

The most pressing need identified in this community, by means of previous research and training interventions, was for the women to be able to generate a sustainable income (Botha, 2005; Du Plessis, 2004; Kruger *et al.*, 2006; Masetloa, 2004). This would be done by utilising local knowledge and experiences as well as skills gained from previous training interventions.

- *Community meetings*

Community meetings were organised as the next step to establish buy-in and project interest among community members, inviting all interested women to a central location in the area. This was also the stage where the facilitator got to know the women and establish trust (Wasserman & Kriel, 1997:26). Various role-players attended the meetings, including a local Non-Government Organisation (NGO), the appointed facilitator and researcher from the North-West University and women from the community.

During the first meeting the women were invited to meet each other by joining in practical exercises led by the NGO. This was done to create a feeling of coherence and to create a relaxed environment. The women received practical business training during the subsequent six weeks. Meetings took place two to three times a week. The business training included basic marketing techniques, understanding the customer, the need for quality products, as well as basic financial principles. Business training was provided before product development in order to aid with decision making and analysis. Leadership figures within the group of women were identified during the six weeks of training and were used as contact point for the rest of the group. These women were also responsible for assisting with translation where needed. On the whole the group felt more comfortable with the Afrikaans language, rather than English.

The next step was to choose a name for the group. The women unanimously decided on the name: "Holding Hands", for the project. After the business skills training had been conducted, the women realised the need for practical skills

training which would empower them to produce a product which could be sold to generate an income. This would be done to enable the women to address the need in the community for generating an income to ensure increased well-being. Producing a textile product, suitable for current skills, would therefore be the best starting point. It was also necessary to encourage and revive traditional skills to complement sewing skills and to create a unique product in doing so.

- *Traditional skills*

Traditional skills and indigenous knowledge, such as the use of certain embroidery techniques, designs and symbols, colour applications and other skills including building techniques, were very much part of this specific community. Some of these skills were not regularly practised, but resurfaced with some encouragement, especially among the younger women. The best way to discover these skills and to determine the skills level of the group was to give them a practical task to complete, and to evaluate the end product. This would also aid in establishing the natural interest or aptitude the women would have for certain tasks.

- *Skills assessment*

The women were required to hand-sew a small bag as part of the skills assessment. They were given the freedom to select a suitable design to be hand-embroidered on the bag. After the item had been completed the women were given an opportunity to critically evaluate all the products. The reflection process was guided by asking market-related questions to assist the women in establishing which designs would be suitable for production and which ones they enjoyed making. The facilitator further emphasised the basic business principles in which the women had previously been trained as a guideline to the type of designs they selected. It was important to develop a product suitable for their skills level and interest, but also a product with embroidery design that addressed a clear market need. The importance of further testing these possible products according to material availability and market needs was stressed. The next step was therefore to analyse the market and establish fabric availability.

- *Market analysis*

The women were given the task to critically evaluate craft-related textile products whenever they went to nearby towns for their monthly shopping. Products were

inspected for quality, price and availability. During feedback sessions the women were able to develop a product that was suited for their skills level and that would sell in both formal and informal markets. Traditional embroidery skills, which were identified during the skills assessment, were incorporated into the product design. The first product selected was a versatile denim apron for gardening and related work (Photo 1).

Photo 1: Denim apron

To be able to effectively engage in sustainable income-generating activities, the community's available resources had to be established.

- *Identify available resources*

The project focus was to identify available resources and to build on those, rather than to focus on resources the female farm dwellers did not have access to. The

resources that were identified in the community, which the women either had access to or were able to access with some support are summarised in Table 4.3.

Table 4.3: Available resources

Resources	Application
Social and human resources	Previous practical sewing skills producing a few craft products
Social and human resources	Business skills training
Social and human resources	Basic household resource management
Social and human resources	Social networks within the community for child care, cultural and religious support
Financial resources	A few women had access to savings and credit sources
Financial resources	Additional income such as pensions and health grants
Physical resources	Sewing machines were made available from the farm owner
Physical resources	The building where the women could meet to conduct their work was provided by the farm owner

Identifying the available resources the women had access to, and not only their needs, created a positive environment to develop a product that could be sold to generate an income. The next vital phase was empowerment and capacity building in order to equip the women with additional skills to produce a quality product.

4.4.2 Empowerment and capacity building

The encompassing concept of empowerment and capacity building is vital to increasing knowledge, to gaining insight and to motivating community members to function independently from others. The more life skills, practical skills and other competencies can be added to a person's life, the better (Weyers, 2001:175). Capacity building assists in reinforcing communities to develop their skills, to take control of their own destiny, and manage their own future. The learning process includes flexibility, sustainability, values and capacity building (Marais *et al.*, 2001:325; Cook, 1995:280). Capacity building strengthens targeted human resources (i.e. managerial, professional and technical) and provides individuals and

communities with the means whereby these resources can be governed and sustained (Cohen, 1993).

Empowerment includes total quality management, self-managing work teams, continuous improvement and participation management (Cook, 1995:286). Empowerment suggests shifting of power and control to the people doing the bulk of the work within a project. Capacity building and performance are two main components of empowerment. Sustainable development cannot be made possible without any of these components. Empowered individuals or communities are able to perform certain tasks they have never been able to complete (Munslow *et al.*, 1995:25). These individuals or communities experience opportunities opening up for them, which they were not able to access before.

- *Overcoming empowerment challenges and difficulties with income-generating activities*

A number of challenges with regard to income-generating activities were identified within the "Holding Hands" project. The women did not know or understand the formal markets where their products would be sold. The women consequently also did not understand the quality requirements and the need for a unique and appealing product. Delivery dates were not a reality due to the women not understanding the needs of the market; therefore they were not able to plan ahead or to work longer hours if an order was needed at a specific date. Principles such as planning to save some of the profits for new materials and quality control had to be established by means of training and education. Pricing principles of products, including fabric rating of product items, proved to be another vital element to be included in training to overcome challenges and difficulties.

- *Training and education*

Education is one of the most important components towards sustainable development. Education is the course of action where individuals gain knowledge and understanding of specific as well as general subject matter (Rogers, 1992). Training is the method whereby skills are transferred making use of a facilitator to guide the process (Rogers, 2002).

The training components that were implemented in the "Holding Hands" project to address challenges and difficulties are summarised in Figure 4.3. These components were designed according to practical experiences and the needs identified during the needs and livelihoods phase.

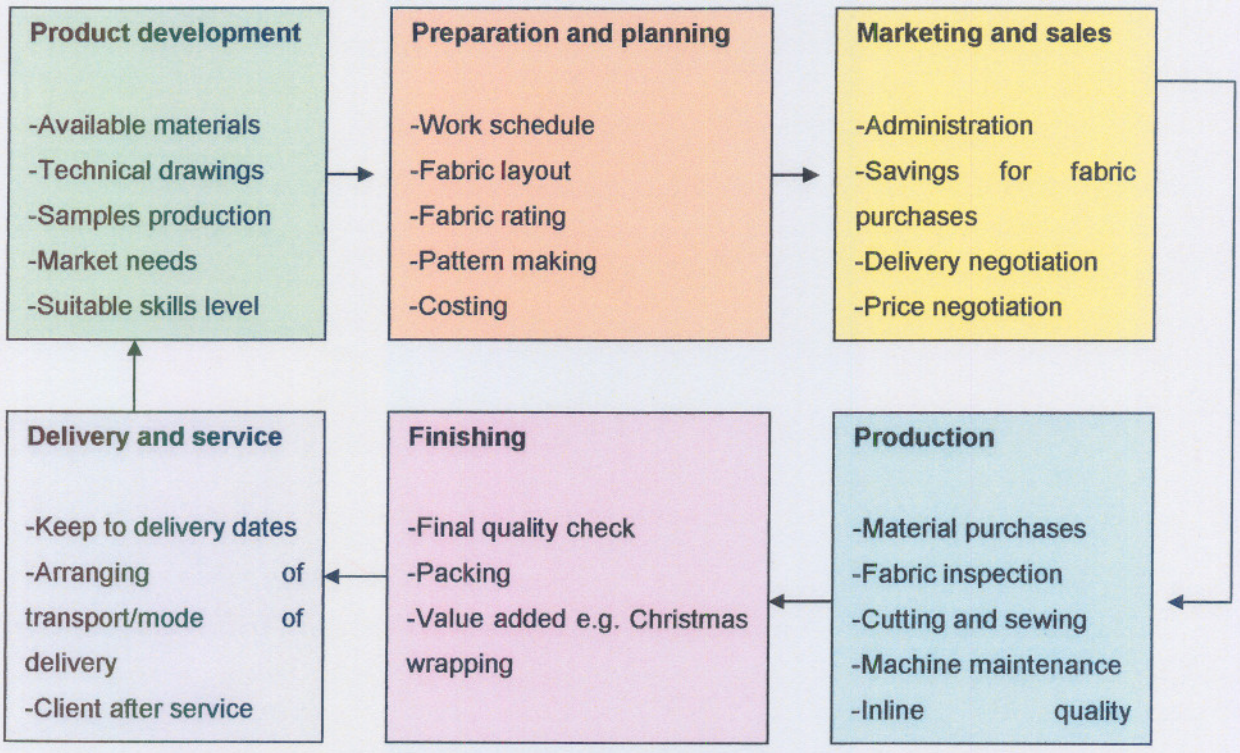


Figure 4.3: Training and education components gathered from the needs- and livelihoods phase of the sustainability checklist design.

- *Livelihood strategies*

The women from the "Holding Hands" project were empowered through capacity building, which entailed training and education that focused on the eventual production of a quality product. They were given the opportunity to identify their available resources and to combine these with their newly acquired capabilities and activities. They experienced an increasing and growing "know-how" with regard to creating livelihood strategies.

Maintaining and improving these livelihoods should indeed create an opportunity to provide sustainable livelihood opportunities for future generations. These resources and capabilities would be maintained and improved if the women undertook to train their children and new group members to be able to deliver similar quality products. The women had to realise that training and learning had to be a life-long

experience. Constant technology improvements and market changes require innovative, new strategies. The women had to be trained to outsource additional technical skills they often did not have access to. Facilitators from within the community could also be trained more extensively in technical skills to bridge the skills gap. These facilitators could then train other project members.

- *Evaluation*

Henderson & Thomas (1987:285-289); Kotzé & Swanepoel (1983:99-100); Pretorius (1988:168) and Swanepoel (1989:72-73) (as quoted by Wasserman & Kriel, 1997:39), provide criteria for evaluation of community development projects. These include: relevance, feasibility, efficiency, cost effectiveness, consequences, acceptance, obstacles and highlights. This criterion for the evaluation of the training and education of the "Holding Hands" project members was established by means of a checklist for the facilitator and a basic skills test for the women.

- *Facilitator evaluation checklist*

Table 4.4 provides an example of a facilitator's checklist that was developed by the researcher for the evaluation of training and education intervention. If it was found that if any of the answers were negative ("no") on the checklist, the training had to be re-planned and adjusted for future purposes to meet the evaluation criterion. Constant re-training would be required for new members and when new products were to be introduced.

Table 4.4: Facilitator evaluation checklist applied to the "Holding Hands" project (adapted from Henderson & Thomas, 1987; Kotzé & Swanepoel, 1983; Pretorius, 1988; Swanepoel, 1989; Wasserman & Kriel, 1997)

No.	Criterion	Question	Yes	No	Comments
1.	Relevance	Do the identified needs, objectives and resources complement each other?	X		Able to generate an income with available resources
2.	Feasibility	Moving at women's, pace and capacity, considering available resources?		X	Not all machines utilised, some women learn faster

No.	Criterion	Question	Yes	No	Comments
3.	Efficiency	Have the project objectives been achieved?	X		
4.	Cost effectiveness	Results in line with costs incurred for training?	X		Business training not sufficient
5.	Consequences	Short term			-Generate income -Self-confidence -Improved nutrition -Funds available
6.	Consequences	Long term			-Empowerment -Capacity building -Improved health -Well-being
7.	Acceptance	Do the women feel encouraged with training results?	X	X	Would like to learn to produce additional products
8.	Obstacles	What were the obstacles experienced during the training?			-Uneven skills levels, causing frustration -Time-constraint -Limited funds -Additional training required
9.	Highlights	What were the highlights experienced?			-Women learning fast -Being able to produce quality product -Generating substantial income

- *Skills evaluation test for "Holding Hands" members*

The skills evaluation test was designed for every area of skills training for each individual as well as the group as an entity. The example used in Table 4.5 focuses on the cutting function for "Person A" at a given date. The evaluation was then used as comparison for future training and when re-training would be necessary.

If any of the members proved not to be on the required skills level at the time of the skills assessment, the particular person had to receive additional training in the required area. In some areas it was necessary to adjust training procedures for ease of learning. An example of such an adjustment would be to change the presentation or demonstrations for certain tasks or to spend additional time on these activities. This had to be done if the Likert scale evaluation proved for most of the women not to succeed with similar learning activities. The key at the bottom of the table indicates the values of each evaluation.

The next phase in the design of the sustainability checklist focused on income-generating activities and the production phase. Business principles strongly applied during this phase and the focus was therefore no longer on empowerment and capacity building, but rather on generating a regular, substantial income.

4.4.3 Income-generating activities and production

Income generating activities contribute to the improvement of women's economic, political and social situation (Due, 1991:79). Generally income-generating activities will therefore pay attention to the preceding phases included in this sustainability checklist, namely a needs and livelihoods assessment and empowerment and capacity building. This is done to address and improve women's social situation, while also giving attention to economic factors. Mehra (1997:149) emphasised the importance of a participative and responsive approach to income-generation, ensuring transfer of project ownership.

Important factors relevant to the income-generating or production cycle included a strong business orientation, product development, improved production systems, building networks, collaborative action and maintenance of resources.

Table 4.5: Individual skills evaluation for "Person A" at a given date for cutting.

Area of skills training: Cutting					
Name: A	Date: XXXX				
Task	1	2	3	4	5
Fabric inspection for flaws; being able to reason when not to use and when it would be acceptable				X	
Pattern layout; incorporating all pieces; not having to re-cut missing pieces afterwards			X		
Calculating rating; establishing if fabric would be enough for order				X	
Accurate cutting (size consistent, notches not too deep)				X	
Adequate speed when cutting					X
Keeping to grain line; decisions when pieces could be turned			X		
Transfer of pattern information, such as notches					X
Accurate bundling of cut pieces				X	

Key:

1 = Poor, retraining in basics required

2 = Average, have to be monitored for when re-training might be required

3 = Acceptable, ready for next level training

4 = Good, ready for training in advanced skills

5 = Excellent, assist with re-training

- *Business orientation*

A strong business orientation includes working smarter and developing new production systems to maintain quality levels, but also to work faster to be able to deliver the products at lower costs. This had to be done to stay competitive in an ever-growing market. Even though product design included a strong component of labour-intensive work, it was still possible to design a productive system to produce products at lower cost.

- *Product development*

It was previously stated that the "Holding Hands" project started with one selected item, based on the skills level of the group and material availability, namely the garden apron (Photo 1). Further market analysis indicated the need for additional products, making use of the same fabrics and basic embroidery designs. This was a natural process where existing clients indicated the need for the project to design special products according to their needs, which could be mass-produced. The women were previously trained for the entire process of product development and had the opportunity to practically apply their knowledge. Whenever it became evident that additional training was required in this specific area, it was done in an informal manner, testing the women often during the training to be sure that they were confident with the specific task. The process of product development included the following steps:

- Testing the market for product needs: clients are probed for views on current products and products they would be interested in buying.
- Designing the product (technical sketches) according to client specifications.
- Conducting a brief skills analysis to determine whether additional training would be required when new products come to be introduced.
- Conducting a brief analysis of available resources and how resources would best be applied in the production process.
- Drawing the pattern for the product to be able to determine the fabric rating.
- Producing a sample to establish work content and time it takes to finish the product, further assisting in determining of work sequence.
- Conducting a costing exercise, including direct and indirect costs and a generous mark-up, ensuring product sell price is competitive with market prices.
- Checking fabric and haberdashery requirements and availability.
- Constructing production planning, including work and training schedules, according to sample production work content and work sequence.
- Presenting product to the client for design, quality and cost approval.
- Negotiating price if necessary and establishing workable delivery dates and quantities.

A list of all the products produced by the "Holding Hands" project is attached for further reference in Table 4.6.

Table 4.6: Extended product range developed on demand of existing customer base.

Product	Description
Apron (Photo 1)	Blue denim knee length apron with colourful hand embroidery on top and bottom pockets (for barbeque or gardening)
Shopping bag (Photo 2)	Large and medium denim bags with side inserts and colourful embroidery on pocket
Drawstring bag	Denim drawstring bag with colourful embroidery on front pocket (suitable for school children or as a gym bag)
Conference bag	Denim conference bag with no side insert with hand embroidery (no side inserts)
Handbag (Photo 3)	Beige natural fibre fabric handbag with solid animal beadwork and leather straps (fully lined) or denim bag with embroidery
Oven gloves (Photo 4)	One-piece denim oven gloves with African embroidery and beadwork (padded inside)
Place mats (Photo 5)	Set of four, six or eight denim placemats with embroidery (padded with topstitching)
School chair bags	Denim bags with school related embroidery designs and separate pockets for different school items and books
Pencil bags	Denim pencil bags with embroidery and zip

- *Improved production systems*

It has already been mentioned in Section 4.4.3.1 that improved production systems lead to productivity. This enabled the "Holding Hands" group to sell products at a lower price than most craft producers are able to do, but still generate substantial profits. Improving production methods further assisted in reaching delivery times and being able to produce more items in less time. This could only be achieved through experience and well-trained individuals working as a close group to achieve targets.

Within a regular production setting a supervisor is generally required to complete the role of motivator to reach set production targets. In community projects engaged

in income-generating activities, it is also essential to have the facilitator or group-selected leader to perform this task. The "Holding Hands" group members also had to learn the importance of setting targets and planning ahead to reach delivery dates. The members would often plan together as to how they would either work extra hours or work "smarter" to achieve a specified delivery date. Experience furthermore encouraged them to plan ahead, incorporating more hands to conduct embroidery work or machine work if needed. The core group would therefore outsource work where necessary.

Photo 2: Shopping bag

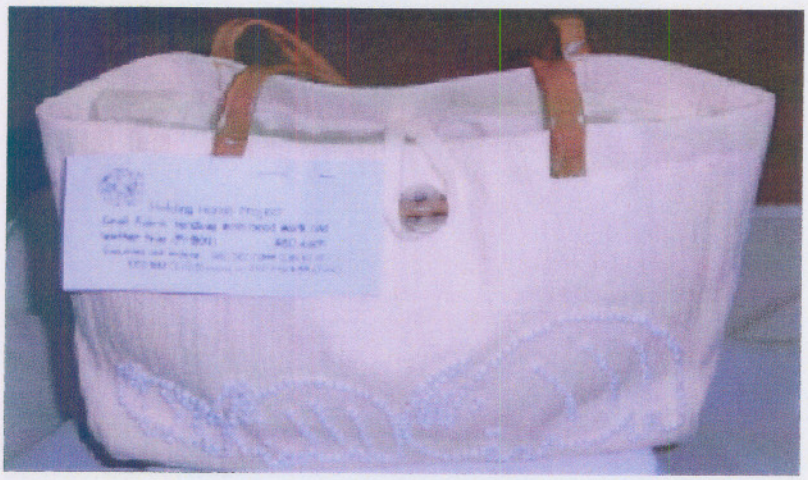


Photo 3: Handbag with beadwork

Photo 4: Oven gloves with beadwork

Photo 5: Place mats

Only a few of the methods applied within the Holding Hands project to improve production systems include:

- Constant re-training in the latest production methods.
- Critical reflection and discussion sessions to establish what the problem areas were and possible solutions to these problems.

- One person performs one task for a substantial time to be able to master the specific task.
- Working as team in a production line, rather than each person producing an item from start to finish, allowing for faster turn-around times (Photo 6).
- Improving construction methods such as inserting a zipper, therefore reducing skills required for a specific task.
- Correcting mistakes as soon as they have been made and not at the end, when the product is already finished.
- In-line quality checks to eliminate the discovery of faults at the end of the production line.
- Training to be able to maintain machinery to eliminate "down-times", such as regular oiling or changing light bulbs and needles.
- Multi-tasking such as winding the machine bobbins, while at work on the same machine, reducing idle time.
- Completing hand embroidery at home and contracting more "hands" to reduce workload for members, at the same time providing a small income for other community members.

Photo 6: Working as a team to complete production tasks

Community income-generating projects, unlike formal business practices, have to work closely together combining resources and strengths where possible. Attention therefore has to be given to building of networks and engaging in collaborative action.

- *Build networks and collaborative action*

The "Holding Hands" group is isolated and has limited access to resources (Kruger *et al.*, 2006). For this reason it was essential to promote and establish collaborative action within the group and other community members, as well as the local community and neighbouring communities. Partnerships for development included networks with professional institutions such as universities or institutions that could provide additional training where needed. The "Holding Hands" members had to be able to rely on other community members to provide assistance when they were unable to meet delivery dates due to workloads. Assistance included looking after children when they were working and being able to outsource work where needed.

Networks also had to be established between group members and material suppliers in order to be able to negotiate prices and to be able to rely on suppliers for assistance with providing goods on time. Networks between suppliers and group members had proved to be complicated due to the relatively small units ordered, but could be established with time and collaboration. Networks further had to be established between group members and clients. Due to the isolation factor it was extremely difficult to bring the group members closer to the client. The facilitator still had to perform this task. For this reason it was found that a community facilitator should be trained to perform the task of building a relationship with clients.

Social networks and collaborative action is categorised as a social resource, but fulfil an important function in community income-generating projects. General maintaining of resources remains crucial and will be addressed within the next section.

- *Maintenance of resources*

    - *Social resources*

Activities to build social resources included group exercises during training sessions, role-play exercises and informal conversations to share experiences and to learn from each other (Photo 7). The introduction of a small action such as taking tea breaks to relax and engage in conversation built relationships and improved work ethics. Maintaining and improving skills was another all-important aspect of social resources. Building networks assisted in building libraries of information and to extend knowledge beyond a specific community. The importance of constant re-training can therefore not be underestimated.

    - *Economic resources*

The need for saving schemes and additional training to manage personal finances became a necessity with the added responsibility of generating additional income. The more established the "Holding Hands" project became, the more products were sold. Maintaining economic resources included saving a certain percentage of the income for buying new stock and savings for unexpected financial events within the project. Generally this would be twenty per cent of the profit put aside for purchasing new materials. Regular stock-takes would further ensure that the group would not overbuy and therefore unnecessarily overspend. Materials were in addition used sparingly, for example using every piece of material to produce items that could be converted into income-generating products.

    - *Environmental resources*

Few environmental resources were employed during production, but whenever these resources would be incorporated in production processes it would be vital to plan for resource maintenance.

Photo 7: Social interaction whilst working

4.4.4 Sustainability

Sustainability, mentioned as the last component in this chapter, essentially forms part of the entire process and acts as an extension of every phase. Sustainability concerns itself with long-term goals, incorporating planning for present and future generations. Typical planning would include flexibility to adjust as resource situations change, migration trends develop or even when communities have to adjust coping mechanisms and livelihood strategies.

A few vital components for project sustainability included training facilitators from the community, encouraging creative skills, identifying areas where additional skills were required, re-evaluating livelihood strategies and training and empowering new group members.

- *Facilitators trained from within the community*

Research conducted from this study and work by Trollip (1997) indicated that income-generating projects tend to be more successful when functioning with the help of a facilitator. Facilitators fulfil the role of organiser, manager and supervisor and are generally people who are well trained in every aspect of the "business" or project. It was identified as a result within the "Holding Hands" project for a

community facilitator to be trained to perform these duties. The community facilitator would need to be highly regarded by community members and to have a relative level of education (if possible) and be motivated, willing and have a vision for the sustainability of the project. These facilitators would receive intense business, computer and skills training, which would enable them to take lead and responsibility for certain functions which would otherwise be completed by the researcher or outside facilitator.

- *Creative skills encouraged*

The future of the project rested on the need for regularly introducing new, fresh ideas, and staying in-tune with market demands. With training and building of confidence, during the empowerment and capacity building cycle, it was possible for the women to engage in research processes to get to know markets. They were further able to realise, through reflection and experience how important it was to bring new ideas to the table and to brainstorm ideas, even if they did not seem viable at the time.

- *Identify and develop additional areas of skills required*

The needs and livelihoods assessment, empowerment and capacity building and income-generating cycles were all characterised by evaluating skills levels of group members. The evaluations aided in decision making for re-training or commencement to the next level of training. Evaluating training and skills levels of members was an essential aspect of the sustainability of the "Holding Hands" income-generating project. This project was characterised by labour-intensive activities and the need for a relatively strong skills component, often true to the nature of rural income-generating projects. Skills were as a result seen as one of the most important social resources of the project.

- *Re-evaluate livelihood strategies and resources*

Livelihood strategies and sustainability principles focus on "meeting the needs of present generations, without compromising the ability of future generations to meet their own needs" (De Satgé, 2002:xxi). The above can only be achieved when resources are constantly monitored and evaluated. This could be done by making use of the sustainability checklist and a set of specifically designed indicators, which act as measures for sustainability.

- *Train and empower new group members*

Well-trained core members were able to transfer skills to new members joining the "Holding Hands" group. New members included younger members from the community and other individuals from nearby communities contracted to assist with embroidery of products. Future generations would also be able to benefit from skills transfer in this manner, where parents would be able to train their children.

4.5 CONCLUSION

Indicators, as measures for sustainability, provide direction and purpose to income-generating projects. This chapter built on the three dimensions of sustainability to develop indicators for sustainability, especially for the "Holding Hands" project in the North West Province. During all the stages or cycles, society, the environment and the economy were considered in planning for sustainability. The chapter briefly addressed traditional measures or indicators of sustainability to demonstrate the importance of seeing a community as an integrated system incorporating all dimensions of sustainability. A sustainability indicator checklist was furthermore provided, addressing four main areas namely the needs- and livelihoods phase, empowerment and capacity building, income-generation and production and finally sustainability. It became evident as the study progressed that sustainability should form part of every phase and should not be seen as a separate phase on its own.

The needs and livelihoods assessment focused on identifying needs, hosting community meetings, establishing traditional skills, conducting skills assessments, conducting market analysis and also determining available resources. Empowerment and capacity building addressed issues such as overcoming challenges, conducting training and education, designing livelihood strategies and engaging in evaluation. The income-generation and production phase included business orientation, focusing less on empowerment, product development, improved production systems, building networks and finally maintenance of resources. The sustainability phase, incorporated in each of the above phases, brought these concepts together in categories of training facilitators from within the community, encouraging development of creative skills and identifying and developing additional areas of skills. Re-evaluation of livelihood strategies and

resources and training and empowerment of new members, were subsequently also addressed as sustainability indicators.

The final chapter will provide a brief conclusion and recommendations to this study and specifically recommendations to the "Holding Hands" project. These principles would be applicable to similar income-generation projects, working towards sustainability.

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CHAPTER 5: CONCLUSION AND RECOMMENDATIONS

5.1 INTRODUCTION AND SUMMARY

The study addressed various aspects with regard to income-generating activities and the sustainability thereof. Chapter One provided the reader with a broad background of previous interventions conducted within the specific community in the Rysmierbult area, North West Province. The orientation and problem statement of the study was as a result discussed, providing the aim and objectives of the study. The aim of the study, namely to investigate the necessary and contributing factors for sustainable income-generating projects, was provided. A discussion of the methodology, indicating a participatory action research approach and model, elucidated additional concepts of essence.

Chapter Two covered an in-depth literature study. Specific attention was paid to the concepts of income-generating activities as well as to relevant indicators and dimensions of sustainability.

Chapter Three, a research article, aimed to provide the reader with a practical glance of the "Holding Hands" project and how the principles and cycles of Participatory Action Research (PAR) were applied and implemented in the project, directing the way to sustainability. A number of similar, successful projects were analysed according to a number of sustainability factors, making use of a comparison table.

Chapter Four focussed on the practical implementation of sustainability indicators. Traditional measures of sustainability were addressed and the importance of incorporating all three dimensions of sustainability was highlighted. A checklist was designed to guide the "Holding Hands" project towards sustainability, which could also be applied in similar income-generating projects. The four main phases for measures of sustainability included a needs and livelihoods assessment, an empowerment and capacity building phase, the actual income-generating and

production phase and lastly, sustainability as the all-encompassing factor completing every phase.

5.2 CONCLUSIONS ON THE OUTCOMES OF THE STUDY AND RESEARCH RESULTS

From the study results and the findings of various authors in the literature, it is evident that income-generation interventions have to follow a Participatory Action Research (PAR) approach. Communities must be held responsible and accountable for their own development, be it with the help of external organisations. The efforts and activities embarked upon should be bent on expanding and establishing empowerment and capacity building to the people of the community. It also became evident that satisfactory outcomes and progress could not be attained and secured by merely focussing on the social aspects of income-generation, engaging in empowering activities only, but that devoted attention should also be paid to the economic side of income-generation. For this reason a number of sustainability measures or indicators have been developed. Without any of these components present in an intervention directed at income-generation, sustainability cannot be achieved.

Results from the study further reinforced the fact that sustainability should be properly defined according to time and long-term planning, typically over a period of twenty-five to fifty years. It will therefore not be possible to argue that a community income-generating project can be sustainable in five or even ten years except if defined according to such a short term. Literature and results from this study further indicated that sustainability has to be community orientated, again following a participative approach for the entire community. Linkages between the various dimensions of sustainability and carrying capacity for each of the available resources were identified. Finally sustainability had to be measurable, therefore a set of indicators was developed during the course of this study.

From the study it also became apparent that any community would be able to engage in sustainable income-generation, if and when these basic principles of

PAR and sustainability indicators were implemented. A livelihoods approach had to be followed, focussing on available resources instead of focussing on resources communities do not have. Selecting items for production or activities matching the available resources and traditional skills would be the first step towards sustainability of these activities. It also became evident from this study that the engagement of a facilitator who could constantly focus on motivation and encouragement of participants, and who could provide guidance to overcome barriers, should undoubtedly be regarded as essential if sustainability of income-generating projects on farming communities were to be secured.

The following section will provide a short list of recommendations based on the results of this study.

5.3 RECOMMENDATIONS AND AREAS FOR FURTHER RESEARCH

Following a participative approach as discovered by the application of the PAR process, the following recommendations can be made:

- Allow communities to be responsible for their own development.
- Learn from communities, incorporating indigenous knowledge in project planning.
- Enter the community with no preconceived ideas as to how the intervention should be conducted.
- Conduct planning in conjunction with input from those who belong to the community.
- Allow time for reflection and sharing of learning experiences.
- Build healthy relationships with the community members in order to be able to provide valid recommendations in an acceptable manner. The facilitator's awareness must most certainly be alerted to this aspect.
- Promote mutual respect among project members in own circle as well as between participants and facilitators.
- Motivate and inspire project members to remain enthusiastic members and to accept ownership as part the project and take into account that it is

neither necessary nor compulsory to involve or incorporate community members who are not interested in being part of the project.

- Create a setting for transfer of ownership from the very beginning of the intervention or project.
- Make use of sustainability measures or indicators.
- Assist communities to monitor and evaluate their own progress.
- Detect possible delays or problems before they occur. (Operate pro-actively)
- Gain knowledge on what the available resource situation within a specific community is and monitor allocation of resources.
- Conduct in-depth livelihoods assessments.
- Focus on available resources and not on the resources communities do not have.
- Allow for communities to design livelihood strategies and plans to obtain or have access to additional resources.
- Maintain and enhance resources through saving schemes, following and tracking sustainability indicators, and maintaining networks.
- Be sure to have a checklist, assisting the community members to control their own development, working towards sustainability.

Much could be learnt from the "Holding Hands" project and the following general additional project recommendations can be made:

- Participatory action research is time-consuming and sufficient time should be allocated in order not to rush any step in the process.
- Facilitators and researchers should be patient because development takes time, and they must have an open mind and commit themselves to learning from the experiences at hand.
- Every small detail, however insignificant it may seem, has to be documented.
- Facilitators have to allow co-workers or colleagues who are able to provide insight into the project and provide recommendations to do so and to check observations as far as possible.

- Checklists and evaluations are vital for both the facilitator and project members.
- Whenever project members are not ready to move on to the next stage in the sustainability indicator process, re-training in the specific area of skills should be conducted.
- It is recommended that all income-generating projects, especially those in rural communities or farming communities, reach the point where the project or programme is critically evaluated with a view to strengthening and reinforcing the possibilities of sustainable development. It is essential to implement some form of measuring device or system for sustainability.

This study identified the following areas, which could enjoy attention as part of further research:

- Group dynamics and managing groups within disadvantaged farming communities.
- In-depth study into motivational factors for income-generating groups.
- The influence of conducting in-depth livelihoods assessments prior to commencement of income-generation interventions.
- Best practices to be identified to enable the facilitator to hand the project over to the community ensuring the project remains sustainable.
- Practices for training of local facilitators within the community.
- Overcoming difficulties and challenges in rural areas, such as isolation and lack of transport.

Limitations of the study will consequently be discussed.

5.4 LIMITATIONS OF THE STUDY

The study unfortunately did not allow for an in-depth livelihoods assessment, due to time and cost constraints, also because a livelihood assessment was not one of the study's objectives. As the study progressed it became evident that a project of this nature should not be conducted without an in-depth livelihoods assessment before

the study commences. It is recommended that the assessment must be conducted at the same time as the needs assessment.

The "Holding Hands" group at this point needed additional in-depth business training. Conducting formal follow-up business training is recommended once basic skills training have been completed. Training of this nature could also be conducted at a later stage, when members truly understood the importance of business principles. The women would then only really be ready to appreciate these business principles and how they could be implemented in practical everyday income-generating activities. This is not to say that the business training at the beginning of this intervention was fruitless. The training planted a seed of curiosity and stimulated creative thinking while also expanding the ability to analyse viable products and coinciding available resources for income-generation.

Each phase identified, for the sustainability indicator checklist, is an expert field in itself. These aspects have only been briefly covered for the purpose of this study and project. It will be possible for group members to adjust these measures according to their community requirements and needs as time goes by. It is therefore also recommended that communities be guided towards being better equipped to do so and towards understanding each phase of the process. It is humanly impossible to know what the future holds, but it was possible to anticipate certain events. The sustainability checklist was therefore compiled based on the study events and project results, incorporating aspects relevant to community at the time, anticipating possible near-future events and resource situations.

5.5 THE FUTURE

The community has undoubtedly benefited from this intervention and project. They were able to generate a sustainable income over a period of three years. The women were provided with an opportunity to gain access to skills training and especially business skills training. The challenge will be to maintain and even improve this situation. It would only be possible if the project members implement the designed checklist for sustainable development. Networks that have been developed, structures that were put in place and planning conducted for each

phase will have to be maintained and constantly updated. Sustainable development, as proved by the study and mentioned in available literature, is a long-term commitment. The real evidence as to the success of study and projects like these will only be evident in generations to come within this specific community.

6. CONCLUSION

The study revealed positive outcomes and results including empowerment, capacity building and a regular income for the female farm dwellers over a period of three years. Despite these achievements a number of serious issues were raised for the sustainability of income-generating projects of this nature. The ability of groups to function without a facilitator was one of the questions asked at the beginning of the study. From the study it became evident that an income-generating group would find it difficult to function without the assistance of a facilitator.

Female farm dwellers still face difficulties, which are often tough or even impossible to be overcome. The study has revealed that when a livelihoods approach is followed, it is possible to focus on available resources, rather than the needs of communities. At the same time it is also important to realise that a needs and livelihoods assessment, empowerment, income-generation or production and sustainability, should become an integrated programme and process of development.

There are still many research areas to be explored within the context of income-generation. A few study areas have been determined, together with a number of limitations to the study. The recommendations listed and the sustainability indicators that were identified will further provide the community with guidelines working towards their own empowerment and development.

If you are blind and I am deaf
*we can **hold hands** and walk the road together*
(Kahlil Gibran)

APPENDIX 1: SPECIAL ACHIEVEMENTS OF THE "HOLDING HANDS" PROJECT

Since the start of the "Holding Hands" project in 2003, a few extraordinary achievements should be mentioned:

1. The nine jobless women, who started the "Holding Hands" group, earn more than R1000 per month from their product sales for the last eight months.
2. The women outsource embroidery work to another thirty jobless women, depending on the orders on hand.
3. In 2005 the "Holding Hands" project was one of five projects awarded with a SANTAM prize for income-generating projects for women initiated by a tertiary institution.

APPENDIX 2: JOURNAL FOR PUBLICATION AND GUIDELINES FOR AUTHORS

JOURNAL FOR FAMILY ECOLOGY AND CONSUMER SCIENCES

Only this article (Chapter Three) will be presented to the editorial committee of the journal for possible publication.

GUIDELINES FOR AUTHORS FOR THE JOURNAL

Editorial policy

- The Journal for Family Ecology and Consumer Sciences (JFECS) is an official publication of the South African Association of Family Ecology and Consumer Sciences (SAAFECS) with the following objectives:
  To provide a medium for reporting scientific research and knowledge pertaining to family ecology and consumer sciences
  To stimulate research and knowledge pertaining to family ecology and consumer sciences through publications of a high scientific standard and in doing so to promote these fields of study
  To benefit the family and the community by means of publications on family ecology, consumer science and related disciplines.
- Manuscripts in the fields of family ecology and consumer sciences and related disciplines are welcomed:
  Articles on original research or other material dealing with research or education
  Critical reviews promoting the theory of or stimulating research in the above fields
  General articles containing new information.
- Review and research articles are published in English or Afrikaans. Contributions are welcomed from both members and nonmembers of the SAAFECS.
- The Editor, a member of the Scientific Editorial Committee, and at least two expert reviewers will critically assess all contributions. These assessments will be deemed strictly confidential.
  View a list of referees used in assessing the scientific merit of previously published articles.
- Manuscripts will be returned to the authors if major changes are required or if the style and presentation do not meet the requirements set out in these Guidelines for authors. The author/s is/are responsible for submitting the article in an acceptable form.
- Submission of a manuscript implies that it is based on original research or work of the author and that he/she holds the copyright. The JFECS has to be informed of any intention to publish the article in another journal. Once the JFECS has accepted a manuscript for publication, the author's copyright transfers to the Journal.
- Authors are fully responsible for the factual accuracy of their contributions. Opinions expressed in articles are those of the authors and not the Editor of the JFECS or of the SAAFECS.
- Authors have to provide a language-edited copy of the final article on disc to the Editor. A certificate to prove that a language practitioner with accreditation by the South African Translators' Institute has edited the article must accompany the final article. The cost of the language editing is for the author's account. The Editor can recommend an accredited language editor who is familiar with the technical terminology of family ecology and consumer sciences.

- Publication fees are levied:
  Authors pay R40 per Journal page before the article is published on the Internet, as well as a single, nonrefundable Handling Fee of R100 (made out to JFECS).
  The cheque must accompany the first submission of the article.
  The language used, the number of words, the number of paragraphs and headings all influence the number of words that makes up a page in the Journal.
  A general guideline is about 800-900words per Journal page or approximately 4000-5000 words per article.
- When the article has been published in Journal format, the author will receive a computer-printed copy of the article accompanied by an invoice. The article is placed on the Internet on receipt of payment.
- Accepted manuscripts are published in order of submission of final manuscripts. Publication in a volume starts at the beginning of January and ends at the end of December.

Assessment criteria for manuscripts

- The following assessment criteria apply:
  Does the manuscript deal with a subject that is important to family ecology and consumer science?
  Is the research or review article that deals with the applied sciences of family ecology and consumer science sufficiently grounded in basic science? Will scientists who read the article recognise the value of family ecology and consumer science as applied sciences?
  Is the presentation style scientific, and does it comply with the technical requirements of the JFECS?
- Since criteria 1 and 2 are difficult to determine, more than one person will serve as judges in the broadest sense.
- The most acceptable length for an article is 3 000 words (approximately twelve typed pages, 1,5 spacing). Longer articles are accepted provided all sections are equally relevant. When a series of articles on a single research project is considered for publication, each article has to be a complete unit. Each article in a series is judged on its own merit.
- The following specific criteria apply to research and review articles:
  Are the objectives and/or hypotheses clearly stated?
  Does the literature reviewed in the article cover the theory that supports the research design, the results and the conclusions of the study?
  Are the research and statistical designs clearly and concisely stated so that reliability and validity can be judged?
  Are the findings logically presented and correctly interpreted so that the conclusions also follow logically?
  Research for publication need not be as fully documented as the original research report from which it has been taken. However, it should be complete enough for readers to evaluate all aspects of the procedures that were followed.
- Review articles:
  Is the review topical? Does it integrate information better than other available sources? Does the information overlap with that of other review articles?
  Is the frame of reference of the review recognisable?
  Have all relevant studies and not only those that agree with the author's viewpoint been considered? Are the conclusions logical and objective?
  Does the review contribute to theory and knowledge on the subject? Was the relevant literature critically and analytically studied to ensure a new synthesis?

Preparation and technical detail of manuscripts
Components of a manuscript

Each separate part of the manuscript begins on a new page. Arrange the different parts as follows:

- . Title page
- . Summary in Afrikaans if the article is in English, and vice versa
- . Abstract of 200 words in English with five to ten search words in English
- . Text
- . References
- . Tables
- . Figures

1. Title page
The manuscript is sent anonymously to the reviewers, but all identifying information should appear on the title page:

- . concise title that reflects the contents of the article (Avoid study, effect and new and use terms that are useful for information retrieval.)
- . name, current address, telephone number, fax number, e-mail address of each author (Male authors may give only their initials if they prefer. However, it is customary for female authors to write one first name in full. The same initials and/or name should be consistently used for publications in the JFECS to facilitate indexing.)
- . information on support the author/s received, financial or otherwise, whether the manuscript forms part of a larger project, and other relevant information
- . a colour photo may accompany the manuscript, or an electronic photo may be dispatched in.jpeg / .gif format to: seugnet@icon.co.za when the final manuscript is presented for publication.

2. Summary
The second page of the manuscript – numbered Page 1 – contains the title of the article and a summary of the article in Afrikaans if the article is in English, and vice versa. In a research article this abstract should present a summary of, for example, the hypotheses, the method, the most important findings, and the implications. For a review and other articles it should cover aspects such as the aims, the most significant viewpoints of various writers, a summary and/or a conclusion.

3. Abstracts and search words
An abstract of not more than 200 words in English. Please supply five to ten search words in English.

4. Text
The text begins on a separate page. Manuscripts should be typed in 1,5 or double spacing on A4 paper, on only one side of the paper. Leave 30 mm margins on both sides, an extra space between paragraphs and between subheadings. Number every paragraph in the left-hand margin to facilitate the task of the reviewers. Headings and subheadings: No more than three heading and subheading levels should be used. Headings and subheadings are not underlined. The three levels are dealt with as follows:

HEADING
First-level headings are typed in the upper case bold. Two spaces (three manual line breaks) are left above and two below the heading.

Second-level subheading
This subheading is typed in lower case bold. A space (two manual line breaks) is left above and below the subheading.

Third-level subheading A space (two manual line breaks) is left above the subheading. The first sentence begins on the same line, with five spaces between the subheading and the start of the sentence.

5. Writing style
Authors should use correct technical terminology and avoid unnecessary repetition and circumlocution. All numbers from one to twelve are to be written in full, except fractions, units of measurement, statistical data and symbols. When a number is inevitable at the beginning of a sentence it must be written in full. Only acknowledged abbreviations and symbols should be used. Less well-known abbreviations have to be explained. The symbols % and °C are typed next to the figure without a space (25% and 40°C). Metric terminology and symbols have to comply with the recommendations of the Metrication Department of the SABS.

6. References
The Journal uses a user-friendly adaptation of the Harvard system:

- References in the text Literature cited in the text is arranged unnumbered and alphabetically according to author on a separate page.
- Quotations and references to literature in the text are accompanied by the author's surname, the year of publication and the page number, in brackets (Smit, 1987:12).
- Facts or arguments that are not those of the author are supported by a source reference. When the source is an article, the author's name and the date are required. When the source is a book, the page/s are also required.
- References to literature with three or more authors require the first author's name only, followed by et al (Louw et al, 1986:34).
- Different publications by an author in the same year are indicated by a, b, etc: Brown (1998a &1998b) found that ...
- References to different publications of the same author are made with the dates in chronological order: (Du Plessis, 1987, 1988, 1995a, 1995b & 1999).
- References to an anonymous source require the title of the publication in the place of the author's name (Fur and fur-like fabrics, 1971:15).
- References that are frequently used by authors who publish in the JFECS are illustrated below.

Please note the use of punctuation marks, spaces, italics and capitals.

Books, government publications, proceedings and theses:

KINGDON, J. 1997. *The Kingdon field guide to African mammals*. San Diego. Williams. (Book with one author)

GIBSON, R. 1997. *Prisoner of power: the Greg Blank story*. Johannesburg. Clarke. (Book with subtitle)

ESCHLEMAN, JR. 1993. *The family. An introduction*. 7th ed. London. Allyn & Bacon. (Book with several editions)

SWART, PJ & BLACK, JP. 1999. *A tour of South Africa*. Johannesburg. Haigen. (Book by two authors)

LONGENECKER, JG, MOORE, CW & PETTY, JW. 1994. *Small business management: An entrepreneurial emphasis*. 9th ed. Cincinnati. South-Western.

South African Association of Family Ecology and Consumer Sciences. 2000.

Home economics in South Africa. Pretoria. (A book published by an organisation, association or institution)

South Africa. Department of Constitutional Development. 1993. *Negotiating a democratic South Africa. Pretoria.* Government Printer. (A government publication)

Fifth National Congress of the South African Association for Family Ecology and Consumer Sciences. Potchefstroom. 2000. *Proceedings*. Pretoria.

South African Association for Family Ecology and Consumer Sciences. (Proceedings of conferences, congresses)

NYE, FI & BERARDO, FM (eds). 1966. *Emerging conceptual frameworks in family analysis*. 1966. London. Collier-MacMillan. (Book with an editor or compiler as author)

McINTYRE, J. 1966. *The structure-functional approach to family study.* In Nye, FI & Berardo, FM.1966. Emerging conceptual frameworks in family analysis.
London. Collier-MacMillan. (Chapter by an author in a book edited by another person)

SCHöNFELDT, HC. 1997. *Effect of age on beef quality*. PhD thesis. Pretoria. University of Pretoria.

Articles in journals and newpapers:
ERASMUS, AC. 1998. A suggested approach to educating consumers on the purchase of electrical household appliances. *Journal of Family Ecology and Consumer Sciences* 26(2):145-151. (Article by one author)

VILJOEN, AT & GERICKE, GJ. 1998. Methodology for the collection and application of information on food habits and food preferences in menu planning of heterogeneous groups. *Journal of Family Ecology and Consumer Sciences* 26(2):89-102. (Article by two authors)

BOSMAN, MJC, VORSTER, HH & STEYN, HS. 1998. The effect of storage on the characteristics of high-fibre muffins with different levels of a protein-based fat substitute. *Journal of Family Ecology and Consumer Sciences* 26(2):131-144. (Article by three or more authors)

KOTZE, NJ. 1999. The influence of residential desegregation on property prices in South Africa: the Pietersburg case study. *Journal of Family Ecology and Consumer Sciences* 27(1):48-54.

Administration of technical information groups. 1959. *Canadian Journal of Chemistry* 30(1):7-14. (Article by unknown author)

NGWEZI, P. 2000. Flood victims near city get a helping hand. *Pretoria News* 16 February:1.(Article or news item under author's name)

Crime down within 3 years, says Selebi. 2000. *Pretoria News* 16 February 2000:2. (Anonymous article or news item)

Jonassen, DH. *Technology as cognitive tools: learners as designers*. Available on line. URL: http:/itech1.coe.uga.edu/itforum/paper1/paper1.html. Accessed 15 April 1999. (Article on the Internet)
7. Tables

Well-planned tables contribute to the value of an article. In view of the relatively high cost associated with publishing tables, only essential information should be included in support of the text. Each table has to be typed on a separate page and as far as possible in 1,5 or double spacing. Tables have to be numbered and given headings that reflect the content:

TABLE 1: RANKING OF THE FIVE MOST IMPORTANT ACTIVITIES AND RESPONSIBILITIES OF HOME ECONOMISTS

Each column should have a heading and should contain measurements of the same unit. No full stops are used after headings. Note the use of a decimal comma. Abbreviations (explained in a footnote under the table) may be used as space is limited. In the text a table is referred to by its number: Table 1 or (Table 1). Indicate placement of the table in the text as follows:

Place Table 1 here

Please look at other specific technical details about typing tables, and for examples of tables elsewhere on the Web site.

8. Figures

Carefully selected graphs, sketches or other graphic material that could facilitate understanding of the text. Bear in mind that figures have to fit into one or two columns of the Journal. Detail may be lost in the process of scaling down graphic material to fit into one or two columns. Design the graphics with the width of a column (75 mm) or page (170 mm) in mind. The largest size graphics is 225 mm x 170 mm. Text-based figures should be constructed in Microsoft Office PowerPoint 97/2000 and saved as a PowerPoint Presentation (.ppt format). Use Arial type-face as the base font for all text-based figures. Charts should be constructed in Microsoft Office Excel 97/2000 and saved an Excel spreadsheet (.xls format). Use Arial type-face as the base font for all text in charts.

Graphical material accompanying the text should be in a format that is ready for typographical processing. Additional fees will be charged for editing of incorrect graphical material. Photographs or maps should be clear, with sufficient contrast. Protect photographs and maps between two sheets of cardboard. Do not attach photographs or maps to the protective cardboard or manuscript. Identify photographs and maps by writing in soft pencil on the back near the edge. All photographs and graphic material are referred to as figures. Most of the conventions for tables apply to figures as well, except that figures have subscripts:

FIGURE 1: FACTORS THAT INFLUENCE THE FORMATION OF HABITUAL EATING HABITS

In the text figures are referred to by their numbers: Figure 1 or (Figure 1). Indicate placement of the figure in the text as follows:

Place Figure 1 here

APPENDIX 3: EXAMPLE OF A QUESTIONNAIRE USED TO OBTAIN INFORMATION WITH REGARD TO SUCCESSFUL, SIMILAR INCOME-GENERATING PROJECTS IN SOUTH AFRICA

Dear facilitator/group member

Thank you for assisting me with this questionnaire. Completing the questionnaire will only take a few minutes of your time. Kindly mark the appropriate box for each corresponding question with an X. Where indicated multiple answers are allowed.

Name of the group:

_____

Contact person: _____ Position: _____

Contact tel. no.: _____ Cell no.: _____

Fax no.: _____

E-mail address: _____

Website: _____

Address:

_____

1. Location of the project or group (Province):

1. KwaZulu Natal	2. Mpumalanga	3. Gauteng	4. North-West	5. Western Cape
6. Northern Cape	7. Limpopo	8. Eastern Cape	9. Free State	

2. Size of group / number of members:

1. <5	2. 5-8	3. 9-12	4. 13-15	5. 16-20	6. 20-30	7. >30

3. Year project or group was established:

1. 1980-1990	2. 1991-2000	3. 2001-

4.Project or group ongoing?

1. Yes	2. No

5. How was the project or group initiated (multiple answers allowed)?

1. Community meetings	2. Traditional skills	3. Previous skills learnt
4. Funder/facilitator initiative	Other (please state):	

6. Type of craft / income (multiple answers allowed):

1. Vegetable garden	2. Building/construction	3. Bread making	4. Candle making
5. Traditional arts & crafts	6. Sewing: Clothing/ Interior	7. Crocheting/knitting	8. Pre-school activities
9. Beadwork	10. Fashion design	11. Footwear	12.Woodwork
13. Florist	14. Jewellery	15. Basket weaving	16. Ceramics/pottery
17. Embroidery	18. Paperwork	19. Recycled items	20. Textiles
Other (please state):			

7. Income per month per member:

1. <R100	2. R100-R300	3. R301-R500	4. R501-R800	5. R801-R1500
6. R1501-R2000	7. R2001-R3000	8. >R3000	Other (please state):	

8. Outside funding received at any time?

1. Yes	2. No

9. Saving scheme for members?

1. Yes	2. No

10. Saving scheme implemented successful?

1. Yes	2. No	N/A

11. Committee structure within the project or group?

1. Yes	2. No

12. Membership fee paid by each member?

1. Yes	2. No

13. Profit share method applied:

1. Member paid for item sold	2. Equally to each member	3. According to hours worked
4. Profits paid in one bank account and paid on request		Other (please state):

14. Percentage put aside for new stock:

1. <10%	2. 11% - 15%	3. 16% - 20%	4. >20%	Other (please state):

15. Facilitator?

1. Yes	2. No

15. Role of the facilitator (multiple answers allowed):

1. Mediator	2. Resolve conflict	3. Address unhealthy competition	4.Initiator of project or group
5. Trainer	6. Funder	Other (please state):	

16. What is the meaning of project sustainability to you (multiple answers allowed):

1. Ownership transferred	2. Sufficient income	3. Growth & empowerment of members
4. Being able to export	5. Exposure	Other (please state):

17. Male/female group members:

1. Only female	2. Female and Male	3. Only male

18. Successes (multiple answers allowed):

1. Given a reason to live	2. Provided with income	3. Help time pass	4. Networking
5. Support	6. Recognition	7. Courage/independence	8. Self-worth
Other (please state):			

19. Challenges (multiple answers allowed):

1. Lack of access to markets	2. Lack of sufficient income	3. Lack of start-up capital

4. Lack of quality systems	5. Low motivation level	6. Obtaining raw materials
7. Lack of sufficient skills	8. Lack of product costing skills	9. Transparency, jealousy, inequality
10. Lack of marketing skills	Other (please state):	

20. Recommendations (multiple answers allowed):

1. Require start-up capital or funding	2. Practical skills training	3. Business skills training
4. Financial intermediaries for loans	5. Realistic saving scheme	6. Participate in decision-making
7. Existing markets explored/new found	Other (please state):	