



## **A Growing Link? Organic Farming and the Tourist Industry in Zanzibar**

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**Declaration**

I, Astrid Johanne Mikidadi, declare that this thesis is a result of my research investigations and findings. Sources of information other than my own have been acknowledged and reference list has been appended. This work has not been previously submitted to any other university for award of any type of academic degree.

Signature... *Astrid Johanne Mikidadi*  
Place and Date... *Zanzibar 14.12.11*



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## Abstract

Since Zanzibar opened up for tourism in the late 1980s, the industry has remained fairly detached from other spheres of society. Very few Zanzibaris are employed in this fast growing, high income industry. Moreover, a connection is especially lacking with the agricultural sector. The direct effect of this missing link is a deficiency in supply of locally produced agricultural products to hotels and restaurants. Recently, many organisations and some government agencies have started to focus on organic farming in Zanzibar, based on various health, environmental, economic, and market related incentives. Empirical data that helps to delineate the relationship between (organic) agriculture and the tourism industry in Zanzibar is currently limited.

This thesis utilizes the methodology of political ecology, including stakeholder analysis, to map key actors in Zanzibar's organic farming and organic tourism sectors, to search for connections amongst them and to explore the rationale behind their involvement. Through the application of a case study approach, this study seeks to uncover how organic farming operates as well as the difficulties and benefits of practicing it in Zanzibar. Furthermore, it aims to assess the contribution of organic farming (for tourism) to socio-economically and environmentally sustainable development for Zanzibari farmers.

Holistic analysis of the organic farming and organic tourism sectors reveals several key findings. Firstly, agriculture in Zanzibar is based on traditional farming methods, which some label as 'organic by default'. Secondly, the dominant rationale for all stakeholders in organic farming in Zanzibar is the health benefits. Thirdly, amongst others, the functioning of the market, seasonality, small, unstable produce and unsuitability of temperate varieties are major constraints for organic farmers and tourist operators alike. Fourthly, local and organic food is used and marketed by a few socially and organically inclined tourist operators. Lastly, organic farming leads to improved knowledge, productivity and profitability and therefore contributes to socio-economically and environmentally sustainable development for farmers.

Key words: *organic agriculture, tourism, Zanzibar*





# Table of Contents

Declaration .....	ii
Acknowledgements.....	iv
Abstract .....	vi
List of Tables .....	xi
List of Figures .....	xi
List of Pictures .....	xi
Acronyms and Abbreviations.....	xii
Swahili Phrases .....	xiv
<b>1 Introduction</b> .....	<b>1</b>
1.1 Background .....	1
1.2 Problem Statement .....	2
1.3 Aim of the Study .....	5
1.4 Objectives and Research Questions .....	5
1.5 Structure of the Thesis .....	6
<b>2 Key Concepts and Definitions</b> .....	<b>7</b>
2.1 Organic Agriculture .....	7
2.1.1 Definition of Organic Agriculture .....	7
2.1.2 The Conceptualisation of Organic Agriculture .....	9
2.1.3 The Dispersal of Organic Agriculture .....	10
2.1.4 Organic Standards and Certification .....	11
2.1.5 Participatory Guarantee Systems.....	13
2.1.6 Organic: a Debated Approach to Farming .....	14
2.2 Tourism and the Tourist Industry.....	17
2.2.1 Tourism in Developing Countries .....	18
2.2.2 Tourism, Food Supply and Agriculture .....	20
2.3 Sustainable Development .....	26
2.3.1 Sustainable Tourism .....	27
2.4 Ontological Approach .....	29
2.4.1 Political Ecology.....	29
2.5 Epistemological Approach .....	32
2.5.1 Case Study .....	32
2.5.2 Stakeholder Analysis .....	33

<b>3 Literature Review</b>	<b>35</b>
3.1 Historical Overview and Development of Organic Agriculture in Africa	35
3.2 Extension of Organic Farming in Africa	37
3.3 Mechanisms for Development of Organic Agriculture in Africa	39
3.4 Local African Organic Market	41
3.5 International Market for African Organic Produce	43
3.6 Possibilities and Challenges with African Organic Agriculture	44
<b>4 Study Area Description</b>	<b>47</b>
4.1 Ecology and Environment of Zanzibar	47
4.2 Agriculture on Zanzibar	51
4.3 Population and Settlement in Zanzibar	53
4.4 Historical, Political and Economic Context of Zanzibar	55
4.5 Tourism in Zanzibar	56
<b>5 Methodology</b>	<b>61</b>
5.1 Research Strategy	61
5.2 Research Design	62
5.3 Data Collection	63
5.3.1 Sampling and Data Collection Techniques	64
5.4 Data Analysis	66
5.5 Challenges to Qualitative Research	67
5.6 Ethical Considerations	68
<b>6 Results and Discussion</b>	<b>71</b>
6.1 Stakeholder and Network Analysis of Organic Agriculture and the Tourist Industry in Zanzibar	71
6.1.1 Stakeholder Analysis	71
6.1.2 Stakeholder’s Rationale for Dealing with Organic Agriculture	77
6.1.2.1 Organic Agricultural Sector	77
6.1.2.2 Organic Tourism Sector	82
6.1.3 Network Analysis	87
6.2 Extension, Practice, Productivity and Profitability of Organic Agriculture in Zanzibar	90
6.2.1 Extension of Traditional (‘Organic by Default’) and Organic Agriculture	90
6.2.2 Practice, Productivity and Profitability of Traditional (‘Organic by Default’) and Organic Agriculture	91
6.2.3 Extension of Certified Organic Agriculture	96

6.2.4 Practice, Productivity and Profitability of Certified Organic Agriculture .....	98
6.3 Status Quo, Constraints and Possibilities with the Connection between Organic Agriculture and the Tourist Industry in Zanzibar .....	101
<b>7 Conclusions and Recommendations .....</b>	<b>109</b>
7.1 Conclusions .....	109
7.2 Recommendations .....	113
References .....	117
Appendices .....	126
Appendix 1: Interviews Summary .....	126
Appendix 2: Interview Guide for Organic Farmers .....	129
Appendix 3: Interview Guide for NGOs/CBOs .....	132
Appendix 4: Interview Guide for Government Agencies .....	134
Appendix 5: Interview Guide for Organic Certification Agencies .....	136
Appendix 6: Interview Guide for Universities/Research Institutions .....	138
Appendix 7: Interview Guide for Organic Farming Businesses .....	140
Appendix 8: Interview Guide for Organic Farming Groups/Cooperatives .....	143
Appendix 9: Interview Guide for Hotels, Restaurants, Catering Services, Producers, Shops and Tourist Operators that Sell, Use and/or Promote Organic Produce .....	146

**List of Tables**

Table 1: Examples of claims made by tourism researchers and practitioners.....19  
Table 2: The negative and positive impacts of tourism on agriculture.....24  
Table 3: Definitions of sustainable tourism terms.....27  
Table 4: Extension of organic farming in Africa and Tanzania.....38  
Table 5: 2002 Census Results in Brief – Zanzibar.....54  
Table 6: Stakeholders relevant to research.....65  
Table 7: Stakeholders in organic farming and the tourist industry in Zanzibar.....72  
Table 8: Connections between stakeholder groups in organic farming and the organic tourism sector in Zanzibar.....88  
Table 9: Main links in the network between organic farming and the organic tourism sector in Zanzibar.....89

**List of Figures**

Figure 1: Groups of actors in tourism development.....34  
Figure 2: Local Tanzanian organic agriculture logo.....37  
Figure 3: Map of Zanzibar Archipelago.....48

**List of Pictures**

Picture 1: Organic agroforestry farming on coral rag land in Jambiani, Unguja.....52  
Picture 2: Dada organic food placard.....84  
Picture 3: Tusife Moyo organic spice products road sign in Kidoti, Unguja.....84  
Picture 4: JUWAMKU organic vegetable farmer group in Donge Mnyimbi, Unguja, show their homemade organic boosters and pesticides.....93

## Acronyms and Abbreviations

<b>ACRA</b>	Association for Cooperation in Rural Areas in Africa and Latin America
<b>ASSP/</b>	Agricultural Services Support Programme/
<b>ASDP-L</b>	Agricultural Sector Development Programme – Livestock
<b>CBO</b>	community based organisation
<b>CCM</b>	<i>Chama Cha Mapinduzi</i> (Party of the Revolution)
<b>CHICOP</b>	Chumbe Island Coral Park
<b>CUF</b>	Civic United Front
<b>EAS</b>	East African standard
<b>EIA</b>	environmental impact assessment
<b>ENVIROCARE</b>	Environment, Human Right Care and Gender Organisation
<b>EPOPA</b>	Export Promotion of Organic Products from Africa
<b>FAO</b>	Food and Agriculture Organisation
<b>FFS</b>	farmer field schools
<b>FIBL</b>	Research Institute of Organic Agriculture
<b>GAFA</b>	Gando Farmer Association
<b>GDP</b>	gross domestic product
<b>GMO</b>	genetically modified organism
<b>GNU</b>	Government of National Unity
<b>IFAD</b>	International Fund for Agriculture Development
<b>IFOAM</b>	International Federation of Organic Agriculture Movements
<b>IMF</b>	International Monetary Fund
<b>IMO</b>	Institute for Marketecology
<b>IPM</b>	integrated pest management
<b>JUMWAM</b>	<i>Jumuiya ya mtandao wa kulima wa mboga mboga na matunda mkoa wa kaskazini Pemba</i> (Network Organisation for Farming of Vegetables and Fruits in the North Region of Pemba)
<b>JUWAMKU</b>	<i>Jumuiya ya Wanawake na Maendeleo Wilaya ya Kaskazini</i> (Organisation for Women and Development in the North District)
<b>KATI</b>	Kizimbani Agricultural Training Institution
<b>LDC</b>	least developed countries
<b>MALE</b>	Ministry of Agriculture, Livestock and Environment
<b>MVIWATA</b>	<i>Mtandao wa vikundi vya wakulima wa Tanzania</i> (Network of Farmer Groups Tanzania)
<b>NBS</b>	National Bureau of Statistics
<b>NGO</b>	non-governmental organisation
<b>OFA</b>	Organic Farming Association ( <i>Jumuiya ya UHAI Zanzibar</i> )
<b>PADEP</b>	Participatory Agricultural Development and Empowerment Project
<b>PGS</b>	Participatory Guarantee Systems
<b>PPD</b>	Plant Protection Division
<b>RGOZ</b>	Revolutionary Government of Zanzibar
<b>SIDA</b>	Swedish International Development Cooperation Agency
<b>SCF</b>	Small and Medium Enterprises Competitiveness Facility
<b>TanCert</b>	Tanzania Organic Certification Association
<b>TAZOP</b>	Tanzania Zanzibar Organic Producer

<b>TBS</b>	Tanzania Bureau of Standards
<b>TOAM</b>	Tanzania Organic Agriculture Movement
<b>TZS</b>	Tanzanian shillings
<b>UMB</b>	<i>Universitetet for miljø og biovitenskap</i> (Norwegian University of Life Sciences)
<b>UNCTAD</b>	United Nations Conference on Trade and Development
<b>UNDP</b>	United Nations Development Programme
<b>UNEP</b>	United Nations Environmental Programme
<b>UNESCO</b>	United Nations Educational, Scientific and Cultural Organisation
<b>UNWTO</b>	United Nations World Tourism Organisation
<b>USD</b>	United States dollar
<b>UWAMWIMA</b>	<i>Umoja wa wakulima wa matunda na mboga mboga wilaya ya Magharibi</i> (Association of Fruit and Vegetable Farmers in the West District of Zanzibar)
<b>VSO</b>	Voluntary Service Overseas
<b>WB</b>	World Bank
<b>WCED</b>	World Commission on Environment and Development
<b>ZAFFIDE</b>	Zanzibar Association for Farmers' and Fishermen's Development
<b>ZANOP</b>	Zanzibar Organic Producer
<b>Zanz-Germ</b>	Zanzibar-Germany
<b>ZAREC</b>	Zanzibar Recyclers Company
<b>ZATI</b>	Zanzibar Association of Tourism Investors
<b>ZCT</b>	Zanzibar Commission for Tourism
<b>ZEST</b>	Zanzibar Enterprise and Sustainable Tourism
<b>ZSTC</b>	Zanzibar State Trading Cooperation

## Swahili Phrases

<b><i>Dawa</i></b>	Medicine (for people or animals). Also used for synthetic agrochemicals
<b><i>Dawa ya asili</i></b>	Natural medicine – Bio-pesticide. Mainly consisting of spices.
<b><i>Duka la pembejeo</i></b>	Agricultural supplies shop
<b><i>Kilimo hai</i></b>	'Agriculture life' – Organic agriculture
<b><i>Makuti</i></b>	Palm fond, used for roofs and fences
<b><i>Marubaini</i></b>	'Cure for forty diseases' – Medicine, mainly produced from the Neem tree but often including aromatic plants and spices
<b><i>Mbolea</i></b>	Compost/fertiliser/manure
<b><i>Shamba</i></b>	Farm/field
<b><i>Sheha</i></b>	Chief of a village/part of a town
<b><i>Wanda</i></b>	Open land

This is the finest place I have known in all of Africa to rest before starting my final journey. An illusive place where nothing is as it seems. I am mesmerised.

David Livingstone, Zanzibar, 1866

As the stranger passes close to the deeply verdant shores of Zanzibar Island, he views nature robed in the greenest verdure, with a delightful freshness of leaf, exhaling fragrance to the incoming wanderer.

Henry Stanley, *Through the Dark Continent*, 1879



# 1 Introduction

## 1.1 Background

Long after the heydays of the British explorers Livingstone and Stanley, who appreciated the fertile, mysterious and hospitable qualities of Zanzibar, the Indian Ocean islands have become a major destination in the East African tourist circuit. The tourist industry has exploded on the island of Unguja, the most visited of the archipelago. The attractions include white sandy beaches fringed with coconut palm trees; swimming, snorkelling or diving in crystal clear turquoise water, where coral reefs are abundant; visiting lush spice plantations which reveals the island's previous glory as the top clove exporter in the world; and sightseeing in Stone Town, the United Nations Educational, Scientific and Cultural Organisation (UNESCO) heritage listed town, with narrow streets full of bazaars, old Sultan palaces and buildings and built in a mix of African, Arabic, Indian and European styles.

However, this tropical exotic island, a tourism delight, is far from paradise for most of its poor inhabitants. Indeed, the title of an article written by Action Aid, an nongovernmental organisation (NGO) working on the islands, is quite revealing: "Holiday Heaven is Workless Hell for Zanzibar Islanders" (Action Aid 2003). Certainly, very few Zanzibaris are employed by the tourist industry, and the trickle-down effect of tourism has been minimal, especially when it comes to establishing linkages with local producers of a tourism industry necessity, namely agricultural products. Much of the farming in Zanzibar is so-called 'organic by default' – as many farmers grow traditionally, and/or are too poor to afford synthetic fertilisers and pesticides. There is no explicit government policy to develop organic agriculture on the islands, however, many NGOs and community based organisations (CBOs) promote it. There is not a lack of both government and non-governmental initiatives to train, support and link farmers with the tourist industry in Zanzibar. But the problems within Zanzibari agriculture are also many, amongst others: low productivity, seasonality, small plots, low status of

farming, lack of viewing farming as a business, pests and diseases, limited access to inputs, reliance on middlemen who push the farmers' profit down and unsuitability of growing many of the temperate crops in demand.

## 1.2 Problem Statement

According to Laurence (2000), due to the booming tourist industry on Zanzibar there is an increasing demand for 'European' vegetables and thus for local production. However, the islands, bustling with fresh fruits and spices, provide almost none of the food the tourist industry requires. With the exception of fishermen, almost no local producers have managed, or taken an interest in taking advantage of the new market. Also, the tourist industry proclaims the difficulty in investing in and buying directly from local farmers. Consequently, approximately 80 percent of the industry's foodstuffs are imported from the Tanzanian mainland, Kenya, South Africa and the Arabic peninsula (Wood, K. R. 2010 personal communication<sup>1</sup>). But as the tourist industry is growing, and some develop a trendy environmentally focused 'green' image, the demand for and marketing of local (certified) organic produce is slowly increasing. Organic produce is sold in some shops and markets, restaurants and hotels, and the first catering business in Zanzibar wrote on its web-page:

*"The ever increasing demand of hotel supplies on Zanzibar motivated us to the idea of establishing an hotel catering service on Zanzibar. The idea behind it is to supply the hotels with fresh, locally grown nature products, like vegetable, fruits, fish and spices, furthermore to encourage local farmers to diversify their products, so that less products need to be imported from the mainland. We emphasize on organic farming"* (Zanzibar Market 2009, own emphasis).

However, the overall tourist industry in Zanzibar seems to be little preoccupied with obtaining a socially responsible and/or green image. This can amongst others be attributed to two major issues. Firstly, visiting Zanzibar together with mainland activities such as

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<sup>1</sup> K. R. Wood is a VSO volunteer who has co-written a value chain analysis on tourism and agriculture in Zanzibar

climbing Kilimanjaro and going on safari is a once in a lifetime and expensive experience for many, due to Tanzania's geographical distance to most Global North<sup>2</sup> visitors. Partly therefore the tourist return rate is low (Wood, K. R. 2010 personal communication). This has implications for the industry, as they won't spend much money and effort on 'unnecessary' social or environmental programmes, to impress tourists who probably won't return anyway. Undoubtedly, most tourists mainly choose a hotel due to its location and level of comfort, not because it is eco-friendly. Secondly, the all inclusive type hotels provide another factor, since the visitors have paid on booking, the likelihood of them changing hotels during the stay is minimal. These charter tourists are therefore different from the backpacker type who most likely will be looking at several hotels before deciding where to stay. An eco-profile could in this scenario be that extra factor which differentiates one hotel from the other. The all inclusive style arguably attracts one section of the tourist market who are interested in the facilities and luxury of the hotel sphere and less interested in exploring and meeting with the local environment and people of the destination. Therefore the hotels offer enough to tempt visitors to come into their secluded world, but most do not bother to attribute themselves with social or environmental agendas which importance and value are mostly unnoticeable on the inside of the high hotel walls. The all inclusive tourism that is replacing the backpacker tourism in Zanzibar is thereby creating a 'bubble' of luxury and cleanliness, where the poor, polluted outside world is ignored and shut off with high walls. Therefore, the new Doubletree by Hilton hotel can be built next to a garbage dump<sup>3</sup>.

Indeed, to my understanding, many of the tourists seem to come for the pristine tropical beaches, and less for the people, culture and history of Zanzibar. This is particularly true for the tourists who have first visited the mainland, having gotten their dose of African culture by visiting a Maasai village or exploring the local handicraft markets. I have heard many visitors to Zanzibar say, that Zanzibar is all about the sun, beach and party in tourist places, not anything like the 'authentic' African experiences they have had on the mainland.

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<sup>2</sup> In this thesis, the 'Global North' is used in lieu of the so-called 'developed countries' of the 'First World' and in order to distinguish these countries from the 'Third World', 'developing' and 'less developed countries', referred to here as the 'Global South'.

<sup>3</sup> However, this Doubletree by Hilton hotel in Nungwi, Unguja does have a corporate responsibility scheme and the establishment is not an all inclusive type of hotel.

Whether it is the tourists who seek comfort after a dusty trip on the mainland or whether the hotels embrace the luxurious Global North style to detach themselves from the poor surroundings, the limited focus on the unique Zanzibari culture has an effect on local agriculture. Very few hotels and restaurants seem to be preoccupied with giving tourists an authentic Zanzibari culinary experience, but rather focus on the luxury of being served imported cheese and strawberries in the setting of a poor tropical African island. Most establishments serve pizza, pasta and hamburgers and other European and American dishes requiring imported ingredients, instead of adjusting the local Zanzibari cuisine to the tourist's palate. The example of salad is typical: instead of using the local spinach which grows everywhere in Zanzibar, many restaurants serve rocket salad or iceberg lettuce; exotic temperate vegetables which are difficult to grow well in Zanzibar, are water demanding and which sometimes lead to the use of expensive synthetic pesticides.

A collaboration with the agricultural sector would certainly benefit the tourist industry, as hotels would most likely reduce their expenditure on foodstuffs by cutting both cost-adding transportation and buying through multiple middlemen. They could also boast of taking social responsibility by supporting poor local farmers and marketing themselves as green by using fresh, local, organic 'short-travelled' food. Moreover, around half of the Zanzibari population, who are smallholder farmers, could benefit from securing a profitable market. Certainly, according to Mitchell and Ashely (2010:73-74), "the indirect pathway of the food supply chain can be roughly as important as the direct pathway of formal employment for generating benefit flows to the poor". Furthermore, if they progress from traditional ('organic by default') to organic practices, an improvement in the productivity and an increase in the varieties and quality of their produce is likely. Thereby, they could achieve socio-economic and environmentally sustainable development. Even if there are major constraints in both developing organic agriculture and linking local farmers with the tourist industry in Zanzibar, many of these aspects can be overcome with knowledge, cooperation, training, adjustments in policies and facilitation.

## 1.3 Aim of the Study

The overall aim of this study is to investigate the link between the organic agricultural and tourism sectors in Zanzibar. More specifically, this study aims at identifying the stakeholders that sell/use/produce/promote organic products in Zanzibar, to search for connections amongst them and to explore the rationale behind their involvement. Moreover, this study aims to describe how organic farming operates as well as the difficulties and benefits of practicing it in Zanzibar. Furthermore, this study aspires to assess whether organic farming for tourism fosters socio-economic and environmentally sustainable development for Zanzibari farmers.

## 1.4 Objectives and Research Questions

Understand the scope of organic agriculture (for tourism) in Zanzibar

- How many farmers practice organic farming and which crops do they grow?
- How many organic farmers are certified and which crops do they grow?
- How and through whom do farmers attain organic certification?
- What does the farmer understand to be organic produce/farming?
- Who are involved in the use/sale/production/promotion of local organic products?

Understand how organic agriculture (for tourism) operates in Zanzibar

- To what extent are the different stakeholders in organic agriculture and tourism linked?
- How does the market between farmers and tourist operators function?

Understand the incentives for organic agriculture (for tourism) in Zanzibar

- What is the rationale behind the stakeholder's sale/use/production/promotion of organic products?

- To what extent is organic farming directed towards the tourist industry, does it influence what is produced and has there been an increase in organic production and certification which correlates with the growing tourist industry?

Understand the implications of organic agriculture (for tourism) in Zanzibar

- What are the difficulties and benefits of organic farming?
- Does organic farming improve the socio-economic and environmental conditions for farmers?

## **1.5 Structure of the Thesis**

Chapter 2 outlines some key concepts and definitions of organic agriculture and tourism which are the core of this study, and which are needed to understand this thesis, as well as the ontological and epistemological approach. Chapter 3 presents relevant literature on organic farming and marketing in Africa, while chapter 4 entails important background information of the study area, including ecology and environment, agriculture, population and settlement, historical, political and economic context and tourism. Chapter 5 goes through the methodology for collecting and analysing the data this thesis is based on. Subsequently, chapter 6 presents and discusses the empirical findings from the fieldwork of this thesis, before finally, chapter 7 concludes and recommends further research on the topic.

## 2 Key Concepts and Definitions

This chapter is a presentation of the key concepts and definitions that are the core of this study and that will be used extensively throughout the thesis.

### 2.1 Organic Agriculture

#### 2.1.1 Definition of Organic Agriculture

The International Federation of Organic Agriculture Movements (IFOAM), an international umbrella organisation for organic farming organisations established in 1972, has defined organic agriculture in this way:

*“Organic agriculture is a production system that sustains the health of soils, ecosystems and people. It relies on ecological processes, biodiversity and cycles adapted to local conditions, rather than the use of inputs with adverse effects. Organic agriculture combines tradition, innovation and science to benefit the shared environment and promote fair relationships and a good quality of life for all involved.”* (IFOAM 2011a).

IFOAM has further formulated a set of four principles that organic agriculture is based on:

***The principle of health:*** Organic Agriculture should sustain and enhance the health of soil, plant, animal, human and planet as one and indivisible.

***The principle of ecology:*** Organic Agriculture should be based on living ecological systems and cycles, work with them, emulate them and help sustain them.

***The principle of fairness:*** Organic Agriculture should build on relationships that ensure fairness with regard to the common environment and life opportunities.

***The principle of care:*** Organic Agriculture should be managed in a precautionary and

*responsible manner to protect the health and well-being of current and future generations and the environment.” (IFOAM 2011c, own emphasis).*

The definition and principles by IFOAM listed above are arguably quite celebratory, general and vague. There are practitioners of other agricultural systems that could argue they stand for and *should*, as the principles state, practice mostly the same, without being organic. For example, even a ‘conventional’ farmer could argue that also he/she is not relying on *inputs with adverse effects*. Therefore, there is a need to look at what organic farming entails on a more practical note. Organic systems operate by “integrating biological and ecological processes such as nutrient cycling, nitrogen fixation, soil regeneration, allelopathy, competition, predation and parasitism into food production processes” (Bakewell-Stone 2006:9). Organic farmers use techniques such as crop rotation, intercropping, mulching and biological pest control, composting and planting cover crops, so-called green manure. The organic “[i]nputs should be reduced by reuse, recycling and efficient management of materials and energy in order to maintain and improve environmental quality and conserve resources” (IFOAM 2011c). In organic agriculture, the use of synthetic fertilisers, pesticides (including herbicides, insecticides and fungicides), animal drugs and food additives are avoided, and genetically modified organisms are discarded as unpredictable (IFOAM 2011c). Further, organic management must be adapted to local conditions, ecology, culture and scale, making the implementations open for adjustment.

In this thesis, organic agriculture will be used to classify those farming systems in Zanzibar which to a very large extent follow the principles of organic farming presented above. The farming systems in Zanzibar which are often called ‘organic by default’, in the sense that farmers due to various reasons do not use synthetic inputs such as fertilisers and pesticides, will be classified as traditional agriculture<sup>4</sup>. As it was made clear above, organic farming entails much more than just the absence of synthetic inputs. The term ‘organic by default’ hides the fact that these systems may “lack soil building practices and degrade land” (FAO 2011), and therefore do not adhere to the principles of organic farming. Debatably, “true

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<sup>4</sup> However, since traditional agriculture can entail various different farming practices, ‘traditional (‘organic by default’) farming’ will be used when it is appropriate.



organic agriculture is practiced by *intent*, not by default” (Scialabba 2007:ix, own emphasis). At the same time, traditional farming can sometimes be very similar to organic farming (see chapter 3.2), but where farmers possibly lack an understanding of the meaning behind their practices. They farm a specific way because of tradition, not because of familiarity with modern organic theory. It requires thoughtfulness not to be biased towards certified organic farmers, and not to exclude organic farmers simply due to a lack of reasoning, or ‘intent’. Therefore there is a value in classifying some farming systems, with caution and understanding, and due to a lack of a better term, as ‘organic by default’. Also, since traditional agriculture entails a vast variety of farming methods, including for example slash and burn, it is useful to distinguish between them, and not place them all in the same genre. Moreover, since the term ‘conventional agriculture’ is misleading in the Zanzibar context, as well as in the agrarian history as such, those farming systems which apply synthetic inputs are in this thesis classified as industrial agriculture, even though the typical medium to large scale and mechanisation of this type of farming system is limited in Zanzibar.

### **2.1.2 The Conceptualisation of Organic Agriculture**

The birth of organic farming is basically a reaction induced by the spread of industrial farming based on high synthetic inputs. This type of agriculture became ‘conventional’ after a growing reliance on improved, commercialised, cheap and powerful synthetic fertilisers which was introduced after the Second World War (Horne & Page 2008). The organic movement, advocating a type of agriculture by some believed to be a revival of ancient farming methods, can be traced back to the 1920s (Scialabba 2007:ix). The concept of organic farming as we know it today is amongst others based on the research and philosophy of British Sir Albert Howard (1873–1947), who published *An Agricultural Testament* in 1940 (Heckman 2006). Howard was preoccupied with effectively recycling waste materials and so developed a system of composting that became widely adopted (Heckman 2006). Howard was central to developing the idea of modern organic agriculture because of his holistic “concept of soil fertility centred on building soil humus with an emphasis on how soil life was connected to the health of crops, livestock, and mankind” (Heckman 2006:143). Two decades earlier however, the likeminded Austrian Dr. Rudolf Steiner (1861-1925) emphasised in his lectures given in 1924 the “integration of crops and livestock, recycling of nutrients,

maintenance of soil, and the health and wellbeing of crops and animals” as well as the farmer (Diver 1999:2). Steiner’s holistic agricultural system was later named ‘biologically dynamic’ or ‘biodynamic’ by early practitioners and “it is set apart from other organic agriculture systems by its association with the spiritual science of anthroposophy founded by Steiner” (Diver 1999:2).

The system of agriculture advocated by Howard was on the other hand coined ‘organic’ by Lord Walter Northbourne (1896-1982). Northbourne applied Steiner’s theories and later published a book on a holistic, ecologically-balanced approach to farming (Paull 2006). In the book *Look to the Land* (1940), he described the “farm as organism”, “having a complex but necessary interrelationship of parts, similar to that in living things” (Paull 2006:14, Heckman 2006:143). So, by ‘organic’ it was not referred to the “type of inputs used, but to the concept of the farm as an organism (or system in more modern terminology), in which all the component parts - the soil minerals, organic matter, microorganisms, insects, plants, animals and humans - interact to create a coherent and stable whole” (Padel & Lampkin 2010:6).

### **2.1.3 The Dispersal of Organic Agriculture**

The organic sector has experienced substantial growth, especially since it took off in the 1990s. The growth is mainly attributed to increasing environmental awareness of consumers, which has transformed organic production from being supply-driven to demand-driven. Premium prices and subsidies from some governments have also attracted new farmers. However, after several years of double-digit growth, the organic market expanded by just five percent in 2009 (Organic Monitor 2011). The declining growth rate is attributed to the global financial crisis, which, compared to the other continental organic markets, in particular had a negative effect on the substantial European branch (Organic Monitor 2011).

In 2009, there were a calculated 1.8 million organic producers worldwide (Willer 2011). Approximately 37.2 million hectares worldwide were in the same year farmed organically (Willer & Kilcher 2011), albeit, almost two-thirds (23 million hectares) of this was grassland/grazing areas (Willer 2011). The 37.2 million organic hectares account for

approximately 0.9 percent of the world's total farmland (Willer & Kilcher 2011). In other words, globally, organic farmland is still marginal, but there are substantial continental differences in its expansion. The extent of organic farming is largest in Oceania with 12.2 million hectares, followed by Europe with 9.3 million hectares and Latin America with 8.6 million hectares. The list continues with a large drop down to Asia with 3.6 million hectares and North America with 2.7 million hectares, before finally, Africa is listed last with only 1.0 million hectares (Willer & Kilcher 2011).

The market for organic products reached 54.9 billion United States dollars (USD) in 2009 (Willer & Kilcher 2011), a substantial sum, but it is still a niche market within the agricultural sector. Also, the market is divided, with most certified products being consumed in the Global North by people willing to pay premium prices for organic products. This has made some label organic produce as products for the affluent 'elite'.

#### **2.1.4 Organic Standards and Certification**

Organic standards and certification systems were formally created during the 1970s when organic agriculture became a niche sector (Rundgren 2003b). The driving force behind this development was primarily to create trust amongst producers (Rundgren 2003b) and "to create an agreement within organic agriculture about what an 'organic' claim on a product means" (IFOAM 2011b). Secondly, it was created to inform concerned consumers (IFOAM 2011b, Rundgren 2003b). Organic standards regulate production methods and in some cases the final output, while organic certification assures and documents compliance with these requirements. Certification of organic products "set requirements on the inputs used in production at the farm level and on subsequent treatment of the products (processing, packaging, transport and storage) in order to designate products that can be labelled as organic and to eliminate fraud" (Sogn & Mella 2007:9).

Regional groups of organic farmers and their supporters began developing organic standards as early as in the 1940s (IFOAM 2011b), where organic principles were defined by the various producer organisations through consultation with their members (Rundgren 2003b).

Voluntary standards and inspection systems developed independently in parts of Europe, the US, and Australia (Rundgren 2003b). The difference in outcomes from these groups resulted in splits in the movement, which led to various standards being developed (Rundgren 2003b). Presently, “there are hundreds of private organic standards worldwide; and in addition, organic standards have been codified in the technical regulations of more than 60 governments” (IFOAM 2011b). However, by the end of the 1990s there was a broad global understanding and agreement regarding what constitutes organic food production and processing (Rundgren 2003b). This achievement can largely be credited to IFOAM who published its understanding of organic standards in 1980 (Rundgren 2003b). Globally, “IFOAM’s Basic Standards and the IFOAM Accreditation Programme are generally respected as the international guideline from which national standards and inspection systems may be built, and have been used extensively as a reference by standard-setters and legislators” (Rundgren 2003b:13).

When organic products in the 1980s began to appear in more mainstream retailers in Europe and the US, and trade started to increase across borders, governments became more interested in the regulation of the market (Rundgren 2003b). The authorities were also more “concerned about the potential for fraudulent claims and confusion in the consumer’s mind of what constituted organic” (Rundgren 2003b:14). And so, it was once the organic sector became significant, and due to its inability to self-regulate that regulation and the intervention of governments was triggered (Rundgren 2003a). However, in most cases, the organic sector itself turned to governments for legislation (Rundgren 2003b:14).

Organic certification was first instituted in the 1970s by the same regional organic farming groups that first developed organic standards (IFOAM 2011b). Initially, the farmers inspected one another on a voluntary basis, “according to quite a general set of standards” (IFOAM 2011b). On-site inspection to verify that farmers met the standards did not commence until the mid-1970s (Rundgren 2003b). It was during this time, in the late 1970s and early 1980s, that certification organisations were developed, and with the advent of regulations in Europe and elsewhere, organic certification became of interest for commercially-driven certification companies in the 1990s (Rundgren 2003b). Although certification started as a voluntary activity, the market soon began to demand it for sales transactions (IFOAM 2011b). Now it is

required by the regulations of many governments for any kind of 'organic' claim on a product label. Today, organic certification has moved from the initial self-regulating internal certification to rely on third-party certification, entailing a complex and formal documented process. Third-party certification, with external independent certifiers, is necessary in the world-wide anonymous market to assure that the organic standards have been followed. In general, certification "gives organic farming a distinct identity and credibility and makes market access easier" (IFOAM 2011b). The process is regulated by IFOAM's 'Organic Guarantee System' which provides an international guarantee of IFOAM's Basic Standards and the Accreditation Criteria for organic certification (IFOAM 2011b).

However, besides third-party certification and formal standards, there are other methods of organic quality assurance for certain situations and markets. These can be in the form of self-declaration, or Participatory Guarantee Systems (PGS), which are seen by IFOAM as suitable for local markets that are not as anonymous as the standard international trade (IFOAM 2011b).

### **2.1.5 Participatory Guarantee Systems**

Participatory Guarantee Systems (PGS) are locally focused quality assurance systems (IFOAM 2011b), especially designed for groups of poor, smallholder farmers in the Global South. PGS certification of producers is based on "active participation of stakeholders and are built on a foundation of trust, social networks and knowledge exchange" (IFOAM 2011b). The "credibility is ensured through the participation of all stakeholders involved in production and consumption of organic products" (IFOAM 2011b). PGS are often closely linked to local and alternative marketing approaches, making it a holistic approach to production, branding and distribution of organic produce. PGS across the globe are very diverse but share the key feature that "norms are conceived and adopted by the stakeholders through a democratic and participatory process, but always in accordance with the commonly understood sense of what constitutes an organic product" (IFOAM 2011b).

According to IFOAM (2011b), the participatory nature and horizontal structure of PGS allow

more appropriate mechanisms of certification, making it very suitable to small-scale producers. However, in addition to that the organisations involved should be “driven by principles and values that enhance the livelihoods and well being of farming families and promote organic agriculture” (IFOAM 2011b), it is obvious that there is a need for monitoring for this type of system to function and be trustworthy. Therefore, to assure quality and sincerity, the management systems and procedures are documented to demonstrate the producers’ organic commitment and integrity. This feature “includes farmer pledges and mechanisms to verify farmer’s compliance to the established norms, while stimulating participation, organisation and learning processes for all the stakeholders” (IFOAM 2011b). If all is in order, PGS groups can use seals or labels to provide evidence that the farm has followed organic practices. On the other hand, in case of non-compliance with the standards, farmers are sanctioned with “clear and previously defined consequences”, and their actions are recorded in a data base or made public in some way (IFOAM 2011b).

### **2.1.6 Organic: a Debated Approach to Farming**

Organic agriculture stands out for some as an environmentally-, animal- and health friendly opponent to the industrial agriculture which is dominated by large monocultures and synthetic inputs based on non-renewable resources. Organic agriculture is seen as a more natural way of farming, since it tries to mimic nature’s complex ecological cycles and biodiversity. According to Vasilikiotis (2000:6-7), “[o]rganic management practices promote soil health, water conservation and can reverse environmental degradation”. Empirical data from amongst others a survey of 208 farms in 52 countries in Asia, Africa, and Latin America demonstrated that sustainable agriculture – in which organic agriculture is embedded, results in better soil fertility, environment, and health, and promotes ‘social learning processes’ (Pretty *et al.* 2001 in Sogn & Mella 2007). In line with this, Sogn and Mella (2007:2) wrote: “[w]hile the important contribution of agrochemicals to increasing crop yields and reducing pests and diseases has generally been appreciated, their negative impacts on health and environment have become more and more evident during recent decades”.

Many people prefer organic animal products because of the focus on animal welfare. In organic farming, the use of animal drugs is avoided, and animals are fed their natural fodder, instead of depending on feed concentrates. Compared to the factory type of meat and egg production common in industrial farming, most organic animals are free to move both inside and outside on the typical smallholding, and they play an essential part in providing manure to organic farms.

Regarding organic products' health benefits, advocates stress that because synthetic inputs are not utilised in organic agriculture, harmful residues present in the produce are significantly lower than in industrial products (QLIF 2009). However, in many countries, there is a safety net in restricting the amount of residues permitted in any type of edible produce. Nevertheless, because random sampling usually is the method applied to control for chemical residues, possibly not being a good enough protective measure, organic products are considered by some to be the safest option. The question of where the permissible limits of chemical residues in foodstuffs should be is important since exposure to synthetic pesticides is connected to various serious diseases, including cancer and Parkinson's disease (PCP 2010, Lairon 2009).

The issue concerning whether the nutritive value of organic food is higher compared to industrial farming products is highly contested, and it is subject to various research and testing from both organic critics and advocates. Many studies show that consumers claim that organic products taste better than 'conventional products', however, the consumers in those studies made this statement about food that they knew was organically produced (Sogn & Mella 2007).

Certainly, organic agriculture has been criticised by several scholars (N. Borlaug, A. Trewavas, H. Kirchmann, A. Avery etc), especially concerning its capacity to feed a growing world population, as well as its proclaimed sustainability and environmental benefits. One well-known critic is American Dr. Norman E. Borlaug (1914-2009), the 'father of the Green Revolution', who won the Nobel Peace Prize in 1970 for his work with introducing new high

yield varieties. Borlaug advocated large-scale monoculture and input-intensive farming in order to maximise production and so in turn reduce deforestation which took place when clearing new farmland. Borlaug's argument "rests on two contentions: a) the yields from organic agriculture are so inferior to green revolution agriculture (hybrid or biotech crops, synthetic fertilizers, etc.) that organic farmers would require as much as three times the land conventional farmers need to produce the same amount of harvest and b) there is not enough cow manure in the world to supply the nitrogen fertilizer necessary for global organic farming" (Leonard 2007). And so, according to Leonard (2006), Borlaug asserted that organic farming practices, using traditional techniques such as crop rotation, compost and manure to supply the soil with nitrogen and other minerals, can at most feed 4 billion people, and would have required a tripling of the area under cultivation, after increasing "cropland area dramatically, spreading out into marginal areas and cutting down millions of acres of forests" (Borlaug 2000, cited by Leonard 2006). Other researchers have come to a vastly different conclusion. Badgley *et al.* (2007) found that a review of over two hundred crop comparisons showed that organic farming could produce enough food to sustain the current human population and that the difference in yields between organic and non-organic methods were small, with non-organic methods yielding slightly more in 'developed areas' and organic methods yielding slightly more in 'developing areas'.

Obviously, there is disagreement over neutrality of research, scientific evidence, basis for comparison and last but not least, the focal point: is it a question of feeding the world or developing sustainable agriculture. Vasilikiotis (2000:6-7) commented:

*"Our current world food production is more than sufficient to provide an adequate diet to all humans, yet more than 840 million people are suffering from hunger. Hunger is a problem of poverty, distribution, and access to food. The question then, is not 'how to feed the world', but rather, how can we develop sustainable farming methods that have the potential to help the world feed and sustain itself."*



## 2.2 Tourism and the Tourist Industry

The United Nations World Tourism Organisation (UNWTO) defines tourism as “the activities of persons travelling to and staying in places outside their usual environment for not more than one consecutive year for leisure, business and other purposes” (UNWTO 1995:1). This definition, with minor alterations, has stood the test of time and is cited by many scholars on the topic. However, defining ‘tourist’ has proven to be more difficult as there are subtle distinctions for example in differentiating business tourists from migrant workers (Mitchell & Ashley 2010). Also, there is difficulty in defining ‘tourism industry’ as “tourism is an economic activity which is a composite of services and goods surrounded by rather unclear boundaries” (Mitchell & Ashley 2010:8). Official statistics about tourism are therefore often contested, due to unclear international standard system of accounts (Mitchell & Ashley 2010). Also, tourist spending is usually only estimated from the hotel, restaurant and transportation sectors (called the supply side), excluding significant recreation, culture, shopping and leisure activities (called the demand side) (Mitchell & Ashley 2010). If inter-sector linkages between tourism and the rest of the economy are taken into account, the size of the tourism economy is often twice as large compared to the official estimates (Mitchell & Ashley 2010).

According to UNWTO, the global spread of tourism in industrialised and developed countries has a strong trickle-down effect, producing “economic and employment benefits in many related sectors - from construction to agriculture or telecommunications” (UNWTO 2011a). UNWTO definitely takes a holistic stand by encompassing a vast array of segments as the tourist industry, defined as consisting of “the cluster of production units in different sectors that provide consumption goods and services demanded by visitors” (UNWTO 2011b). The broad definition is however narrowed down by UNWTO by only calling sectors tourist industries if “visitor acquisition represents such a significant share of their supply that, in the absence of visitors, their production of these would cease to exist in meaningful quantity” (UNWTO 2011b). A separation is made between industries that are “‘tourism characteristic’ (industries that would cease without tourist consumption) and ‘tourism connected’ (industries where tourists consume significant quantities of the output)” (Medic 2003 in Mitchell & Ashley 2010).

Surely then, in some contexts, the agriculture sector, or parts of it, can fall under the tourism connected label, while in other cases, even if tourists represent an important share of the sector's consumers, it will not be considered a part of the tourist industry. How broadly the tourist industry is defined may influence policy planners and makers' efforts on establishing or developing links between the direct and indirect stakeholders in the tourist industry. By nature, while hotels and restaurants must be located in the area where the tourists reside, their food and beverage production does not necessarily have to. However, if the link is strong enough, local farmers can also be viewed as direct beneficiaries, such as hospitality workers are.

Nevertheless the debated definitions of tourism, whether it should be narrow or broad, supply- or demand-led (Mitchell & Ashley 2010), there is little disagreement that the tourist industry is one of the fastest growing economic sectors in the world (UNWTO 2011a). Today, "the business volume of tourism equals or even surpasses that of oil exports, food products or automobiles" (UNWTO 2011a). The continued growth, diversification and competition among destinations have led the industry to become a significant international economic force.

### **2.2.1 Tourism in Developing Countries**

UNWTO considers modern tourism to be closely linked to development, and encompassing a growing number of new destinations (UNWTO 2011a). According to UNWTO (2011a), these dynamics have turned tourism into a key driver for socio-economic progress and "particularly developing countries stand to benefit from sustainable tourism". Indeed, tourism represents one of the main income sources for many Global South countries. In 2008, 924 million tourists travelled abroad, of which three-quarters started in high or upper-middle income countries, however, forty percent of these journeys ended in a Global South destination (Mitchell & Ashley 2010). These tourists spent USD 295 billion in the Global South in 2007, three times the official development assistance (Mitchell & Ashley 2010). Thereby, tourism has become one of the major sources of gross domestic product (GDP) growth in many of the Least Developed Countries (LDC) and as a key contributing factor for those that have

graduated out of LDC status (Mitchell & Ashley 2010). However, there are several foreign-exchange leakages that may limit the economic benefits of tourism in developing countries (Bélisle 1983). These can occur for example if there are high imports of the food and beverage used in hotels (see chapter 2.2.2), and if there is a high degree of foreign ownership and employment of non-nationals in the industry (Bélisle 1983).

Obviously, UNWTO is a firm proponent of tourism’s contribution to poverty reduction, stating that tourism should be consolidated “as a key agent in the fight against poverty and a primary tool for sustainable development” (UNWTO 2007 in Mitchell & Ashley 2010:4). However, they do recognise that the positive effect tourism has depends on “the quality and the revenues of the tourism offer” (UNWTO 2011a). Not surprisingly, tourism’s ability to reduce poverty has been questioned by some scholars and development practitioners, and research has not contributed to a consensus on the matter (Mitchell & Ashley 2010). Even the pro-poor tourism school lacks reported empirical measurements of beneficiary impacts from its interventions (Mitchell & Ashley 2010), and so we are left with assertions. Table 1 presents some examples of claims made by tourism researchers and practitioners concerning tourism’s positive and negative impact on poor people in the Global South.

**Table 1: Examples of claims made by tourism researchers and practitioners**

Negative claims	Positive claims
Up to 85% of the supposed benefits of tourism ‘leak’ out of the Global South, due to the power of international tour operators, foreign ownership, and high import propensity of tourism	Services generally, and tourism in particular, are among the most viable growth paths for the Global South due to relatively low entry barriers and buoyant growth
Tourism employment is seasonal, low-paying and exploitative	Although we need to be cautious of generalisations, ‘tourism-led growth’ is a reality and the sector often outpaces the manufacturing and agricultural sectors in its relative contribution to economic growth
Tourism employment is secured by those with skills, and is not accessible to the poor	Compared with other sectors, a relatively high share of tourism employment is unskilled or semi-skilled and available to a wider cross-section of the labour market

Poor people are particularly vulnerable to the costs of tourism – wildlife damage to agriculture, opportunity costs of land, lost access to and depletion of natural resources	Tourism creates opportunities for peripherally located markets because the customer comes to the product (the tourist destination or excursion) and makes discretionary expenditure
Tourism expansion crowds out other domestic sectors, leading to de-industrialisation and long term reductions in welfare for the population	Tourism has become one of the major sources of GDP growth in many of the LDCs and a key contributing factor for those who have graduated out of LDC status

**Source: Adapted from Mitchell & Ashely (2010)**

### 2.2.2 Tourism, Food Supply and Agriculture

Bélisle (1983:257) summarised the following concerning agriculture and tourism in the early 1980s:

*“Tourism’s competition for agricultural labor and land, and its impact on land values, land use and food prices, are disputed by researchers and poorly understood. Thorough studies are needed on the nature and extent of tourism food imports and associated foreign-exchange leakages; the reasons a large proportion of the food for tourist consumption is imported; and the variation in food supply patterns according to quality, size, ownership, and location of tourist establishment. Further research will help formulate policies designed to increase the net economic impact of tourism.”*

This call for more research is still relevant, underlined by the inclusion of Bélisle ‘old’ article in Twan Huybers 2007 book entitled *Tourism in Developing Countries*. Indeed, the need for new and broader investigation is demonstrated by the fact that the three articles included in the book discussing tourism and agriculture are from 1983, 1985 and 1996, and in their literature reviews and findings, research conducted in the Caribbean dominates. Furthermore, many more recent books and articles still base their discussions around the finding in these three articles. However, there are lessons to be learnt from the findings from the Caribbean. It shows that tourists are set in their ways, since they want to try traditional local food, but not be continuously fed on them, as they prefer the meals they eat at home (Bélisle 1983). Thereby, in the Caribbean, “[t]he fundamental problem in integrating tourism

and agricultural development [...] is that a 'peasant' food production system is being asked to meet the needs of some of the most sophisticated consumers in the world" (Gomes 1997:194). According to Bélisle (1983) 'indigenizing' menus in order to increase linkages with domestic agriculture is not a good solution if the dishes do not sell well. Instead, local food supply should adapt to satisfy tourist demand.

According to Bélisle (1983), the potential for tourist industry linkages is perhaps greatest with agriculture. This statement seems valid when considering that generally, "food accounts for approximately one-third of tourist expenditure" (Bélisle 1983:258). The proportion of food imports for tourist consumption can therefore significantly affect the economic and social impact of tourism. This is based on the following line of reasoning by Bélisle (1983:258-259):

*"First, if food is imported for tourist consumption, there is a commensurate loss of foreign exchange. Second, there is a loss of opportunity to expand, diversify and possibly modernize the local food production and processing sectors. Third, there is a corresponding loss of potential employment and income in local food production, processing, distribution, and preparation. Fourth, if certain groups, such as farmers, fail to partake of the economic benefits of tourism while other groups derive considerable profits, increased maldistribution of wealth – a major cause of unrest in the area – may result. Fifth, the spatial distribution of tourism benefits may be affected if food-producing areas do not supply hotels. Such areas would not benefit from tourist spending, therefore increasing variability in the regional multiplier effect and making the national multiplier reflect inadequately the spatial dimension of tourism impact. Sixth, negative attitudes toward tourists may result among the local population from the social or spatial concentration of tourism benefits. Such attitudes would likely decrease the satisfaction of tourists and reduce their inflow, curtailing further economic benefits of tourism in the host country."*

Actually, researchers have often questioned whether tourism can utilize local agricultural produce, rather than simply import food for tourists (Mitchell & Ashley 2010). But tourists are not the only consumers of imported food, however they are often 'accused' of

influencing the locals to change their food preferences, the so-called 'demonstration effect' (Gomes 1997). Also, an increase in domestic purchasing power, at least partly brought about by tourism, can make countries proportionately more dependent on food imports than in the past (Gomes 1997). Another influence the tourist industry can have on the local food market is contributing to inflation of food prices, which often correlates with tourist seasons, when demand is high. Tourists can also cause inflation if they are unaware of local prices, sometimes leading them to be charged more, or if they pay more as a tip, thereby setting precedence.

According to Mitchell and Ashley (2010), a significant proportion of the tourist studies literature suggests that the relationship between the tourist sector and food production is antagonistic. However, several empirical studies also emphasise the positive impacts tourism have on agriculture (Mitchell & Ashley 2010) (see table 2 for an overview over claims of negative and positive impacts of tourism on agriculture). Studies that have collected information from hotels generally find that a surprising amount of food is produced locally, and there is little evidence confirming the assumption that higher quality hotels have a greater propensity to import food than other hotel categories or locally owned enterprises (Telfer & Wall 2000 in Mitchell & Ashley 2010). In line with this, Bélisle (1983:260) argues that tourism can "create incentives for local farmers to expand and diversify their production (and possibly improve production techniques) to meet tourism food demand". Also, if tourists consume local food, the demonstration effect can be a positive force for local production and import substitution (Bélisle 1983). Moreover, "tourists can be favourably impressed by local products such as tropical fruit or vegetables. When they return to their home country they may become occasional or regular buyers of such products, thus stimulating exports of countries they visited" (Bélisle 1983:266). Obviously, this positive scenario is not possible for all countries, if they do not export to the tourists' home countries. Keeping in mind the many local, regional and international actors in the tourist industry, there is a 'trickle-up' effect as "tourist expenditure on food benefits more than the agricultural, fishing and food-processing sectors of the host economy" (Bélisle 1983:263). Bélisle (1983) calculated that the producer, wholesaler, and retailer only get between one-third and one-half of tourist food expenditure, as the rest is value added cost for food

preparation and service. Therefore, even if “all the food is locally produced, sold by local middlemen, prepared by local cooks, and served by local waiters, a substantial leakage of food-related tourism foreign exchange may occur if profits are invested outside the host country” (Bélisle 1983:263).

According to Bélisle (1983:260), “[t]ourism can influence agriculture in [...] interrelated ways: It can modify agricultural employment by attracting labor out of agriculture (competition for labor); reduce availability of agricultural land through an increase in use of land for recreational purposes (competition for land); [and] modify land values and land use in areas surrounding tourism developments” (Bélisle 1983:260). Like Bélisle (1983), Mitchell and Ashley (2010) also mention the concern over competition for land, labour and capital between tourism and agriculture. However, Mitchell & Ashley believe this concern is often more based on theoretical assumptions rather than empirical research. The impact of tourism on agricultural employment is certainly disputed (Bélisle 1983). As reported by Bélisle (1983), while some researchers believe that tourism attracts workers and raises the reserve price of labour, some argue that migration from rural areas started before tourism became an attractive employment. Moreover, since hotel work, like agricultural work, is notoriously underpaid, it seems unlikely that tourism can raise the reserve price for labour (Latimer 1985). Competition for land is also disputed because much of tourist land is not good agricultural land (Bélisle 1983). Latimer (1985) questions the alleged competition in developing country islands, and argues that climatic conditions (areas with little rain and beaches versus those with plenty of rain and good soil) actually helped the allocation of land towards its best use. Certainly, the conflicting opinions in the literature on the linkages between tourism and agriculture reveal the complexity of the relationship between them (Telfer & Wall 1996). According to Telfer and Wall (1996:286-287) “[r]elationships between tourism and food production can be placed on a continuum from conflict through coexistence to symbiosis. [...] Within this continuum, agriculture and fishing can be seen as being more than sources of food, for they may contribute positively to tourism experiences through the landscapes and rural activities which visitors can observe”. Telfer and Wall (1996) argue that the two sectors can be mutually reinforcing: tourism promotion focusing on agricultural products can boost demand, while agricultural promotion focusing on regional

landscapes can lead to positive growth in tourism.

**Table 2: The negative and positive impacts of tourism on agriculture**

Negative impacts on agriculture	Positive impacts on agriculture
Competition for land resources	Stimulation of agricultural development
Inflated land values	Increased profitability of agricultural production
Competition for labour resources	Creation of new market opportunities
Increased imports associated with foreign exchange leakages	Providing farmers with increased or supplementary income
Increased food prices	
Changes in cropping patterns	
Decline in agricultural production	
Deterioration of the natural resource base	

**Source: Adapted from Meyer (2006) in Mitchell and Ashley (2010)**

To sum up, the agricultural sector experiences several dynamic externalities from tourist activity (Mitchell & Ashley 2010). The agricultural supply chain provides a potentially important linkage between the tourist sector and the local economy (Mitchell & Ashley 2010), so in theory, tourism can create an incentive for increased local food production (Bélisle 1983). However, there are multiple factors involved in cases where it does not:

- tourists prefer the type and taste of food consumed in their home countries;
- imported food is cheaper than local food;
- hotels accept a higher cost to ensure superior quality and/or regularity of food supply;
- poor communication between producers and catering establishments on the need for and availability of local food;
- poor production planning;
- little, if any, promotion of local foods to tourists or the local population;



- hardly any development of new local cuisine;
- extreme seasonality and variable standard of local food production;
- a general underdeveloped food farming sector in the economies;
- deficient quality of local food (particularly hygienic quality);
- hotel entrepreneurs are not fully aware of the type and quantity of locally available food;
- local farmers do not want to change their traditional crop production;
- farmers cannot increase their production;
- farmers lack information on the types of and quantities of food needed by the hotels;
- farmers are inhibited from dealing with hotels or vice-versa;
- farmers or intermediaries are unreliable in terms of regularity of supply on fulfilling other contract agreements (Bélisle 1983; Gomes 1997).

Gomes argues that these issues “pose no insuperable demand constraints on many countries in seeking to increase their agricultural output and thus substantially reduce their import bill for a wide variety of food items” (Gomes 1997:192). On the contrary, with quality improvement of the local produce and promoting local cuisine, these hindrances will be limited (Gomes 1997). Also, some food import of exotic food types which cannot be produced locally is unproblematic as “very few proponents of greater agricultural self-sufficiency have recommended total import substitution” (Gomes 1997:191). It may not be as simple as Gomes makes it out to be. Based on their own research on specific associations between hotels and local farmers, Telfer and Wall (1996:299) concluded that “[u]ltimately, if [...] projects are to succeed, traditional, small-scale producers must be able to meet the requirements of the modern, large-scale tourism sector. Institutionalizing and maintaining agreements with local producers and suppliers is difficult. However, when this is done successfully, both parties can benefit”.

## 2.3 Sustainable Development

The World Commission on Environment and Development (WCED) Report from 1987, called *Our Common Future*, but commonly known as the Brundtland Report (France 1997), launched what has become the most used definition of the term sustainable development.

*“Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs”* (WCED 1987).

With this, the Brundtland Report demonstrated a “strong people-centred ethical stance, concentrating on the satisfaction of human needs, rather than, for example, on protection of the environment in general” (France 1997:12). Therefore, the concept has been contested, some “radical critics of the Brundtland Report claim that the whole idea of sustainable development is a rhetorical ploy which conceals a strategy for sustaining consumption rather than addressing the causes of the ecological crisis” (Hajer 1995:12). Indeed, the Brundtland definition is still under debate, as the two terms ‘sustainable’ and ‘development’ have several different meanings (environmental, ecological, economic, social and political factors [France 1997]), and merged, the concept is thereby open for different perceptions and interpretations.

The concept of sustainability originally became connected to the term development during the development planning after the Second World War (Adams 2009). Its adoption by the United Nations Conference on the Human Environment in Stockholm in 1972 marked in many ways the turning point in international environmental politics (Hajer 1995). The connection between development and environment was a hot topic in the 1970s and early 80s, raising concerns over issues such as global warming and deforestation. Sustainability then became a keystone in the development discourse and would dominate the development paradigm of the 1990s up until today (Adams 2009). The seemingly uncontroversial, but highly contested 27 principles for the achievement of sustainable development in the 1992 Rio Declaration on Environmental Development, echoed Brundtland’s mantra by stating that “human beings are at the centre of concerns for

sustainable development” (France 1997:12). Thus, it is important to notice that the hegemonic idea of sustainable development is not an outcome of a united agreement between different actors, but rather a struggle, which produces several story lines and narratives within the environmental discourse (Hajer 1995).

**2.3.1 Sustainable Tourism**

The publishing of the Brundtland Report in 1987 also initiated increasing concern over the growing negative impacts of tourism (Croall 1995 in France 1997). The Rio Conference in 1992 thereafter led to a “wider dissemination of the concept of sustainable *tourism* development” (France 1997:11, own emphasis). Based on the principles and recommendations presented in the Rio Declaration on the Environment and Development and Agenda 21, a World Conference on Sustainable Tourism was held in Lanzarote in 1995 (France 1997). The conference developed 18 principles and objectives, a charter for sustainable tourism. Central issues were that tourism development should be ecologically bearable, economically viable; and ethically and socially equitable for local communities. Furthermore, the charter focused on participation of all actors, conservation of natural and cultural heritage and integration into local economic development. Awareness of sustainable tourism and codes of conduct for actors was also emphasised (France 1997). Sustainable tourism is therefore a holistic concept, related to its widespread content as well as its numerous stakeholders. Over the years, various types of sustainable tourism have emerged, reflecting the different emphasis given to environmental, economic and cultural aspects. Table 3 is a summary of the definitions of these sustainable tourism terms.

**Table 3: Definitions of sustainable tourism terms**

<b>Term</b>	<b>Definition</b>	<b>Emphasis</b>
Sustainable Tourism	Sustainable tourism means achieving a particular combination of numbers and types of visitors, the cumulative effect of whose activities at a given destination, together with the actions of the servicing businesses, can continue into the foreseeable future without damaging the quality of the environment on which the activities are based	The responsible management of resources for the use and enjoyment of present and future generations

Alternative Tourism	Alternative tourism aims to put as much distance as possible between itself and mass tourism	Alternative tourism focuses on individualism and having a unique and authentic experience through interaction with the local community and environment
Ethical Tourism	Ethical tourism is a concept that goes beyond the three principles of sustainability. It recognizes that tourists and tourism providers must take some responsibility for their behaviour and attitudes, with each stakeholder group gaining equity in the tourism decision-making process	Tourists and tourism providers have a moral responsibility for their actions
Ecotourism	Travelling to relatively undisturbed or uncontaminated natural areas with the specific objective of studying, admiring and enjoying the scenery and its wild plants and animals, as well as any existing cultural manifestations (both past and present) found in these areas	<ol style="list-style-type: none"> <li>1. Provides for environmental conservation;</li> <li>2. Includes meaningful community participation;</li> <li>3. Is profitable and can sustain itself</li> </ol>
Cultural/Heritage Tourism	Tourism that respects natural and built environments, the heritage of people and place	Respect for the local natural environment and local heritage
Pro-poor Tourism	Pro-poor tourism is not a specific tourism product; it is an approach to tourism development and management which ensures that local poor people are able to secure economic benefits from tourism in a fair and sustainable manner	<p>Pro-poor tourism may improve the livelihoods of poor people in three main ways:</p> <ol style="list-style-type: none"> <li>1. Economic gain through employment and micro-enterprise development;</li> <li>2. Infrastructure gains: roads, water, electricity, telecommunications, waste treatment;</li> <li>3. Empowerment through engagement in decision making</li> </ol>
Responsible Tourism	Responsible tourism is about providing better holiday experiences for guests and good business opportunities to enjoy better quality of life through increased socio-economic benefits and improved natural resource management	<ol style="list-style-type: none"> <li>1. Develop a competitive advantage;</li> <li>2. Assess, monitor and disclose impacts of tourism development;</li> <li>3. Ensure involvement of communities and the establishment of meaningful economic linkages;</li> <li>4. Encourage natural, economic, social and cultural diversity;</li> <li>5. Promote the sustainable use of local resources</li> </ol>

**Source: Adapted from Frey & George (2008)**

Ecotourism is probably the most commonly used term by the general public for any type of sustainable tourism, even if the destination is not relatively undisturbed and the focus is not necessarily on nature and wildlife. Although the tourism industry did not originate the concept of sustainable-, or ecotourism, it was quick to adopt, popularize and mainstream it - and water it down (Honey 1999). This tapping of the public's 'green' sentiments is useful for the tourism industry as a "marketing tool to attract the growing number of environmentally and socially conscious travellers" (Honey 1999:19). According to Honey (1999:47), "[a]lthough tourism executives recognize that the health, sustainability, and profitability of their industry depends in large part on protecting the environment, sophisticated marketing techniques often allow the travel industry to appear 'green' without making fundamental or costly reforms". This so-called 'greenwashing', "exaggerated half-truths", mislead travellers (Frommer 1994 in Honey 1999:49). Even though there has been a general rise in awareness over environmental issues in the last few decades, ecotourism is more mainstream than before, and many travellers have begun "opting for comfort over conservation" (Honey 1999:52). Therefore, one should not put all the responsibility on the tourist industry; after all, unless they are regulated to follow sustainable tourism principles, it is not surprising that they do not sell a product that its consumers have little interest in.

## **2.4 Ontological Approach**

Ontology can be defined as "the theory of underlying structures in biophysical or social entities" (Forsyth 2003:15). It aims at identifying and understanding the nature of being, or simply, the "things that constitute the world's structure" (Forsyth 2003:15). The central point is whether one regards social phenomena and their meanings as something external to social actors, the objectivist view, or as something that people are in the process of fashioning, the constructivist view (Bryman 2008). The following is a brief presentation of political ecology, which forms the ontological approach of this thesis, and hence the basis for analysis.

### **2.4.1 Political Ecology**

This thesis revolves around understanding the connection between tourism and organic

agriculture in Zanzibar and further how organic farming (for tourism) affects Zanzibari farmers. This immediately implies a correlation between the local and the global, as well as the environment related to the social, political and economic sphere. The tradition of political ecology, which seeks to “investigate the interaction of international, national, regional and local actors at the interface of environmental change, economics and politics” (Gössling 2003b:10), operates exactly in this intersection and is therefore well suited. Indeed, political ecology is a powerful tool with which to investigate the role, conflicts, interests, aims, norms and narratives of different actors in the process of environmental change (Gössling 2003b). Political ecology “focuses on the actors’ interests and ideologies in order to understand their role in the observed developments” (Gössling 2003b:10). This framework will thereby allow me to explore the multiple sides of the issue, as well as the rationale of the actors involved in the development and their connections.

The central function of political ecology is to provide insight into the social construction of environmental problems (Gössling 2003b), as global environmental problems are surrounded by narratives about their existence, severity and appropriate solutions (Agder *et al.* 2001 in Gössling 2003b). Therefore, central to the argument is the belief that environmental problems cannot properly be understood without considering their economic and political context (Gössling 2003c). Gössling (2003b:11) argues that “[o]bviously, the perception of the environment is a product of social and cultural experiences and values, thus representing particular human-environmental relations”, Further, “in consequence, imperatives of development and the appropriate use of the environment change in time and space, as they develop simultaneously with the culturally constructed images of nature” (Gössling 2003b:11), leaving no doubts about political ecology’s stance as constructivist. However, it is important to note that “constructivism in political ecology does not seek a dethroning of all that is real”, but rather intend to allow alternative interpretations, which does not “mask political motivations and activities” (Robbins 2004:110).

Political ecology, as an emerging field of interdisciplinary research addressing the politics of environmental change (Gössling 2003c), is a rather young approach that has gained ground among different fields in academia including geography, anthropology, development studies, sociology and forestry during the last decades (Robbins 2004). It can be traced back to the

1970s when the environment became a part of the political agenda and commentators started to highlight politics and political economy in the current ecological crises (Hajer 1995). The term was probably first coined by anthropologist E. Wolf in 1972 in his article *Ownership and Political Ecology* (Robbins 2004). However, it is P. Blaikie who pioneered political ecology with a publication in 1985, and his collaboration in 1987 with H. C. Brookfield produced possibly one of the most used definitions of political ecology:

*“The phrase ‘political ecology’ combines the concerns of ecology and a broadly defined political economy. Together this encompasses the constantly shifting dialectic between society and land-based resources and also within classes and groups within society itself”* (Blaikie & Brookfield 1987:17).

Political ecology comprises several fields, amongst others; common property theory, materialism, peasant studies, feminist development studies, environmental history, and postcolonial studies (Robbins 2004). However, due to this “healthy diversity” (Robbins 2004:72) of various disciplines and the eclectic characteristics of political ecology, it has been defined in a number of ways (Robbins 2004). In recent years political ecologists have started to focus more and more on the discursive dimensions of people-environment interactions, with even more emphasis on ‘power relations’ and how people and stakeholders perceive environment and development problems differently (Agder *et al.* 2001; Forsyth 2003).

Political ecology has become an alternative to apolitical ecologies, with their narrow, local and objective approach, using typical neo-Malthusian concepts such as population growth and the ‘tragedy of the commons’ in explaining environmental problems (Forsyth 2003). Political ecology on the other hand takes the approach of critical realism or environmental realism (Forsyth 2003), focusing on political processes concerning environment and development. Thereby, political ecology is a useful and important approach that can be applied in research about environment and development for analysing local practices, knowledge and perceptions across scales and multiple spaces (Adams 2009).

## **2.5 Epistemological Approach**

Epistemology can be defined as “the theory of knowledge” (Forsyth 2003:15), and refers to the conditions of knowledge or explanations that allow for a better understanding of the ontology. In other words, epistemology defines what is regarded as appropriate knowledge about the social world (Bryman 2008). The central point is whether or not one regards a natural science model of the research process as suitable for the study of the social world (Bryman 2008). The position of positivism advocates the application of natural sciences methods to the study of social reality and beyond, while the position of interpretivism requires the social scientist to grasp the subjective meaning of social action (Bryman 2008). Realism is however an epistemological position that acknowledges a reality independent of the senses that is accessible to the researcher’s tools and theoretical speculations. It implies that the categories created by scientists refer to real objects in the natural or social world. Critical realism asserts that the study of the social world should be concerned with the identification of the structures that generate that world. Critical realism is critical because its practitioners aim to identify structures in order to change them, so that inequalities and injustices may be counteracted. Unlike a positivist epistemology, critical realism accepts that the structures that are identified may not be amenable to the senses. Thus, whereas positivism is empiricist, critical realism is not (Bryman 2008:693). The following is a brief presentation of case study and stakeholder analysis, which form the epistemological approach of this thesis, and thus the foundation for analysis.

### **2.5.1 Case Study**

Case study is a research strategy which focuses on understanding the dynamics present within single settings (Eisenhardt 1989). Case studies are commonly used by political ecologists. Indeed, political ecology has served as “an analytical lens used to document and analyse specific case studies, where the look at the broader social circumstances proved helpful and effective to analysing environmental change and conflict situations” (Schubert 2005:15). Schubert (2005) presents how different authors of case studies focus on various aspects. Some focus on analysing the actors/stakeholders in the environment, as well as their motivations, agency and the limitations to their actions (Schubert 2005) (see chapter 2.5.2).



Other political ecology case studies focus on the role of NGOs, while a great number of scholars focus especially on the activities and struggles of grassroots actors (Schubert 2005).

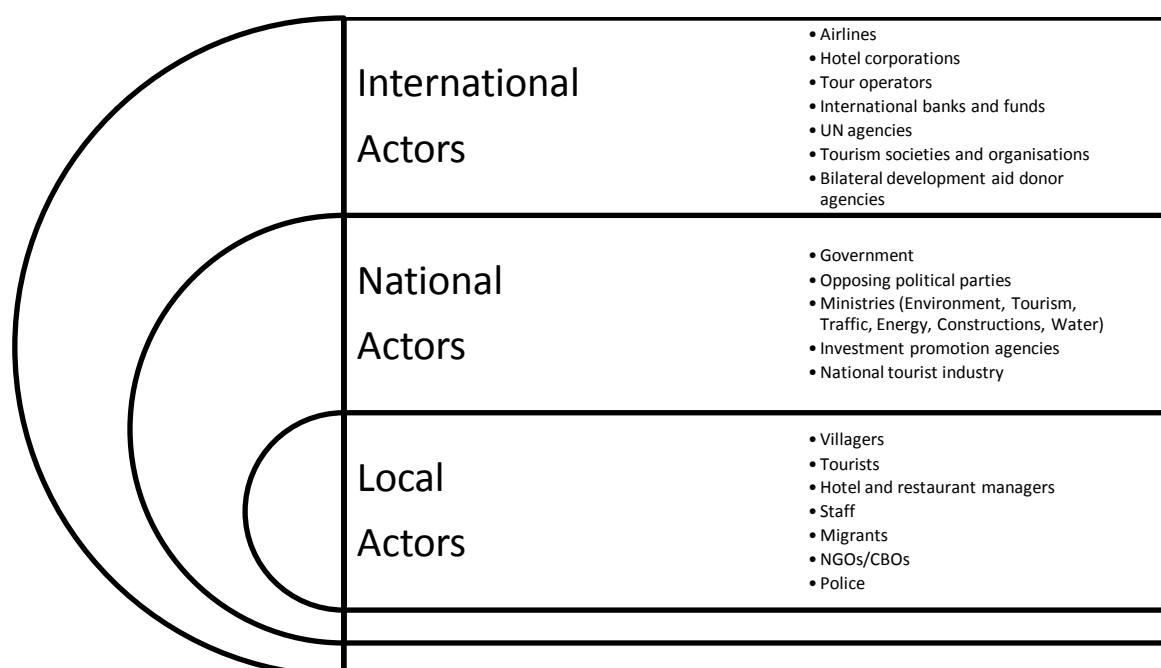
Independent of the focus, “[w]hat remains common to all case study methods employed by political ecologists is the ubiquity of cross-scale analysis and the emphasis on narrative, rather than descriptive, modes of explanation” (Franklin 2004:3). On the other hand, Franklin (2004:3) argues, “it can be seen that the ‘chains of explanation’ approach has not been neatly replaced by discourse analysis as some have suggested. Rather, both methods remain in the analyst’s ‘toolbox’. What has changed in contemporary practice is the move [...] towards ‘progressive contextualization’ where there is an acknowledgement that exploitation takes place as much at the sub-district or household level as it does at the global-local or local-national interface; and where there is an acknowledgement that different groups of people define knowledge, ecological relations, and resources in different ways and at different times” (Franklin 2004:3). Therefore, “[m]ethodologies designed to tease out socio-ecological linkages must seek to engage with this level of complexity” (Franklin 2004:3). As such, case study approach seems to be an appropriate method in understanding complicated socio-ecological issues, which are defined by, and linked to, different people. Because different people represent different relations and knowledge, which are linked to their unique surroundings, case study approach is useful since it is “concerned with the complexity and particular nature of the case in question” (Bryman 2008:52).

### **2.5.2 Stakeholder Analysis**

In political ecology, a basic methodological principle is to “investigate all groups of actors that are directly or indirectly involved in environmental change” (Gössling 2003b:12). Producing an actor, or stakeholder analysis, often reveals a “great variety and number of actor groups [...] involved in planning, decision making, monitoring etc.” (Gössling 2003b:12). Figure 1 is an (incomplete) example of a group actor analysis. Political ecologists usually distinguish between ‘place-based’ and ‘non place-based’ actors (Blakie 1995 in Gössling 2003b:12). Local actors are place-based, national actors are non place-based and international actors are usually non place-based, but place-based actors can also become relevant as non place-based actors (Gössling 2003b:12). An in depth actor analysis should reveal various

stakeholders' "motivations and role in development processes and the resulting impacts on the environment" (Gössling 2003c:xii). According to Gössling (2003b:28), the interests of national and international actors "may often differ from those of local stakeholders, because the group of actors meeting in the development process may generally have very different conceptions of development, environment, place, time, wealth and social relationships, even though development aspirations of local stakeholder groups may generally also follow a broader 'western' pattern of modernization". Thus it becomes clear that mapping of international, national, regional and local actors is pivotal in political ecology when seeking to understand the economic and political context of environmental issues.

Discourse analysis of environmental concepts, hazards and conflicts, has according to Keeley and Scoones (2000 in Schubert 2005), become the most influential branch within the recent political ecology literature. Discourse analysis is however difficult to separate from the "analysis of different stakeholders and their motivations, interests and agency, since discourses and agendas are often inextricably linked together" (Keeley & Scoones 2000 in Schubert 2005:17).



**Figure 1: Groups of actors in tourism development**

**Source: Adapted from Gössling (2003b)**

## **3 Literature Review**

This chapter is an introduction to some of the relevant research and literature on the presence of organic farming in Africa, with a main focus on Tanzania and Zanzibar. In addition to presenting the historical roots and development, extension, market mechanisms and local and international market accessibility of organic farming in Africa, I will look deeper into the challenges and opportunities related to organic agricultural development on the continent. The overview given here will provide a contextual background which will shed light on the research findings presented in chapter 6.

### **3.1 Historical Overview and Development of Organic Agriculture in Africa**

As presented in chapter 2, organic farming is by some considered as a revival, modernisation and theoretification of original ancient farming methods. This implies that the roots of organic farming can be seen as embedded in the history of man-kind's origin in Africa. The African continent has by virtue of amongst others its state of development and marginal adoption of the Green Revolution mainly kept a traditional mode of farming. The low level of adoption can be related to that "Green Revolution packages of high-yield varieties of food crops supported by high inputs of agro-chemicals and water are inherently poorly suited to many semi-arid lands and areas lacking infrastructure (which is the case for most of rural Africa)" (Bakewell-Stone 2006:11). Most farming in Tanzania, and Africa alike, is still for subsistence, although during the past thirty years the use of synthetic inputs, mainly for cash crop production, has spread (Sogn & Mella 2007). However, due to widespread poverty, many African farmers cannot afford expensive synthetic inputs. Of those farmers who did use synthetic inputs, many became poorer because they had to buy more fertilisers and pesticides every year to deal with dying soil and to overcome disease and pest resistance in the crops (Envirocare 1998). Hence, many farmers returned to or continued farming practices

that included natural fertilisers and natural pesticides that were cheaper than the industrial agrochemicals (Sogn & Mella 2007).

In Tanzania, organic agriculture has a relatively long history. Its modern origin can be traced back to 1898, when the Peramiho Organic Garden was established. It grew different vegetables following organic principles including the use of manure and soil conservation (Bakewell-Stone 2006). As the focus on sustainable agriculture, soil and water conservation, agroforestry, integrated pest management (IPM) and other related practices grew in the 1980s, a wide range of different institutions and organisations, including farmers' associations, government research and extension and NGOs, became involved (Bakewell-Stone 2006). The first certification of Tanzanian organic produce took place in the early 1990s (Bakewell-Stone 2006). However, substantial levels of certification were limited by the high costs encountered when using international certifiers. Also, knowledge about certification amongst poor rural farmers was, and still is low. Then, in 2003, the first local certification body, the Tanzanian Certification Association (TanCert) was founded. TanCert was established in cooperation with the Swedish International Development Cooperation Agency (SIDA), which sponsored the program Export Promotion of Organic Produce from Africa (EPOPA) together with the Tanzanian government (Forss & Lundstrøm 2004 in Sogn & Mella 2007). This was a rare involvement by the authorities, as in Tanzania, there are neither any governmental regulations nor any governmental development program for the organic sector (IFOAM 2004 in Sogn & Mella 2007). However, the Tanzanian government did launch a campaign in the 1990s aimed at promoting organic agriculture and related services (Mjunguli 2005). According to Mjunguli (2005), this initiative encouraged people involved in organic agriculture in the country, and so presently there are many organisations and projects that promote organic agriculture in Tanzania. In 2004, TanCert certified organic products for the domestic market, and the following year, it started certifying organic produce destined for the export market. TanCert certify organic products in Tanzania according to two standards, with a guaranty sign (see figure 2). One standard is for the local market and the other is for export. Both are a brief version of the IFOAM principles and basic standards, and take into account the specific conditions for organic production in Tanzania and the current stage of its development in the country (Sogn & Mella 2007).

The 'organic wind' kept blowing over Tanzania, and led to the formation of the umbrella network organisation Tanzanian Organic Agriculture Movement (TOAM) in 2005. TOAM promotes organic agriculture through a focus on the practical fields of coordination, research, marketing, education and advocacy. This unification of the organic movement in Tanzania entailed that organic voices became a stronger force, enhancing the focus on food insecurity, environment and poverty on the political agenda. Today, certification costs are still high, as many prefer to be certified by well-know, international certifiers like the Swiss Institute of Marketecology (IMO). However, the international certifiers who before had to travel long distances to and within Tanzania, have started to utilise the manpower available in TanCert's local crew as inspection officers. Therefore, it is likely that TanCert's reputation and integrity as a serious actor will grow in the years to come, leading to more farmers choosing this local and cheaper certifier. According to Sogn and Mella (2007), certification by TanCert for the local market is affordable and continues to attract many individuals to join the organic sector. Even though certification for export has a higher fee, if farmers utilise group certification, the cost for the individual farmer becomes affordable (Sogn & Mella 2007).



**Figure 2: Local Tanzanian organic agriculture logo**

**Source: Sogn & Mella (2007)**

## **3.2 Extension of Organic Farming in Africa**

Chapter 2.1.3 presented some statistics on the dispersal of organic farming in the world, as well as in Africa. From the presentation, it became clear that among the continents, Africa is listed last with only 1.0 million hectares of the approximately 37.2 million hectares

worldwide that were farmed organically in 2009 (Willer & Kilcher 2011). In supplement to this, a survey conducted in 2005-2006 by the Research Institute of Organic Agriculture (FiBL), listed the following numbers (see table 4):

**Table 4: Extension of organic farming in Africa and Tanzania**

	<b>Africa</b>	<b>Tanzania (numbers from 2003)</b>
Total organic area	1.025.898 hectares	55.867 hectares
Organic farming’s share of total agricultural area	0.2%	0.14%
Organic farms	119.140	30.000

**Source: Parrott et al. (2006)**

Compared to the world, where organic land is 0.9 percent of total farmland (Willer & Kilcher 2011), Africa’s share is 0.2 percent (Parrott et al. 2006). However, of the world’s organic producers, calculated to be 1.8 million worldwide in 2009, 28 percent were located in Africa (Willer 2011). This implies that even if Africa’s organic lands are calculated to be marginal, many more people are involved in organic farming per hectare compared to other continents. In addition, the image of Africa as a continent with very little organic land might be a misconception as Africa may have substantially more organic land. This seems likely because of several aspects; firstly, the low adoption of the Green Revolution, secondly, the high expense of synthetic inputs, which makes it inaccessible for many poor African farmers, and lastly, the low correspondence between organic practitioners and certified farmers on the continent. If only certified farmers can be verified as organic, then a vast segment of African organic farmers, who also to a large extent follow the principles, are excluded. Moreover, because the international organic standards developed amongst others by IFOAM are mainly based on the particularities of temperate, not tropical agriculture, some controlled leeway in their adaption to suit local conditions should be accepted. Arguably, because of the two first conditions mentioned above, in Africa, there is much less difference between organic and non-organic land than in the rest of the world, as non-organic land in Africa is rarely a type of agriculture based on industrial high-input monoculture, but rather a traditional low-input

polyculture. According to Bakewell-Stone (2006) traditional farmers have found ways of improving soil structure, water-holding capacity as well as nutrient and water availability without the use of synthetic inputs, using methods such as intercropping grains and legumes. In line with this, “[a]lthough it may not be recognised as such, organic production is already thought to be feeding the majority of people across East Africa, especially those living outside large conurbations who mainly eat from their own gardens and who, being commonly averse to applying artificial inputs to their own food crops, mainly eat naturally, organically-produced food” (Taylor 2006 in Bakewell-Stone 2006). As a matter of fact, the average use of synthetic fertilisers is estimated to be less than one kilogram per hectare per year, which implies that most of the land is never fertilised with these agrochemicals (Scialabba & Hattam 2002). However, as discussed earlier (in chapter 2.1.1), it is important not to uncritically label traditional farming which does not utilize synthetic inputs as organic or ‘organic by default’, since such an alignment sometimes ignores several important organic farming principles not always present in this type of traditional farming.

### **3.3 Mechanisms for Development of Organic Agriculture in Africa**

Setting aside the grey zone of traditional ‘organic by default’ farming, IFOAM sought to find the factors pushing for extension of full-blooded organic farming in Africa. In 2003, IFOAM therefore commissioned an overview of the organic movement in Africa. The analysis covered both certified and non-certified organic producers in 22 of Africa’s 54 countries where organic agriculture is most advanced. The IFOAM survey identified five different mechanisms through which organic agriculture is currently being developed and promoted, namely:

*“Commercially-driven, certified and export-led organic agriculture that exist without any (significant) external funding, generally practised on large-scale farms and usually for export;*

**Export-oriented organic agriculture**, assisted through development funding, generally aimed at improving the cash incomes of impoverished smallholders by giving them access to premium export markets;

**Non-market oriented organic agriculture**, assisted by donor agencies to meet a range of development objectives such as poverty relief particularly amongst vulnerable groups such as women and female-headed households, combating desertification and global warming, improving soil fertility, promoting the use of local seed varieties and maintaining biodiversity;

**Local organic agriculture projects**, developed by farmer groups and indigenous development organisations as a means of addressing pressing social, economic and environmental problems;

**Research** carried out within local, national and supra-national institutes” (Parrott & van Elzakker 2003 in Bakewell-Stone 2006:12, own emphasis).

The above listed mechanisms reveal the numerous actors and incentives involved in driving organic farming in Africa forward. Related to this thesis, it is of interest to notice that according to IFOAM, no local mechanisms, like the tourist or domestic market, are significant mechanisms for the development of organic agriculture in Africa.

There are multiple actors, local and international, involved in the development of organic farming in Africa. According to Parrott and van Elzakker (2003 in Bakewell-Stone 2006), the formal sector has arisen from significant attempts to engage smallholders in export commodity production, often facilitated by local NGOs and development agencies that see a close fit between organic farming and development objectives. Commercial actors have an interests in capturing the expanding organic market, and so organic agriculture can give opportunities to smallholder farmers to enter commercial agricultural production, contributing to the development of export and local trade (Bakewell-Stone 2006). Furthermore, Bakewell-Stone (2006:37) found that in Tanzania, “[i]n addition to the prospects of improved incomes, organic producers are motivated by health and environmental concerns. The adoption of resource-efficient farming systems such as organic agriculture is driven in part by pressure on natural resources including threats to biodiversity



such as bushfires, dependence on agrochemicals, deforestation, the introduction of exotic species and hybrid seeds, and lack of proper water management resulting in droughts, floods, siltation, erosion and water contamination". Also taking into consideration that the price for artificial fertilisers has been soaring in recent decades (Silenge 1996 in Bakewell-Stone 2006), there is no lack of economic, social, or environmental incentives encouraging the development of organic farming in Africa.

### **3.4 Local African Organic Market**

Reports (Mjunguli 2005; Sogn & Mella 2007) on the local organic market in Tanzania, as in Africa overall, note that it is very marginal, at its infant stage. Obviously, the main segment of the population does not have the same purchasing power as the international market, due to the prevalent dire poverty in the country. This implies that many Africans are not able or willing to pay any additional costs often attached to organic products. In addition to economic reasons, Mjunguli's 2005 report *Opportunities for Domestic Organic Market in Tanzania* ascribe the limited local market for organic produce with the low level of awareness about organic products and organic agriculture amongst the population. Both Mjunguli (2005) and Sogn and Mella (2007) report that many Tanzanians are not able to precisely define or explain what organic products or organic agriculture is.

There are hardly any certified organic produce at all in the Tanzanian market (Sogn 2004), with the exception of organic coffee, tea and cashew nuts (Mjunguli 2005). Not to mention, there is minimal certified organic production of the 'subsistence crops' (maize, millet, sorghum, rice, legumes, roots, tubers, plantain etc), which form Tanzanians' staple diet. However, there are reports of an increasing number of Tanzanians taking interest in the possible benefits of organic food, and concerns over the consequences of using synthetic pesticides (Mjunguli 2005; Sogn & Mella 2007). Also, genetically modified organisms (GMO) worry many, and organisations which promote organic agriculture are active in national campaigns against GMO. This awareness raising has, according to Sogn (2004), led to increased demand for certified organic produce in the Tanzanian market.

Sogn and Mella (2007) researched Tanzanians' interest in and access to organic food. Their findings are interesting as they reveal that Tanzanians have an interest in purchasing organic, natural, healthy food (more than half of the interviewees, in total 130 people interviewed in the large cities of Dar es Salaam and Arusha, reported that they consume organic food, and have done so for more than ten years). In Dar es Salaam, there are two outlets, 'Mum's Kitchen' and 'Natural Food Shop', specialising in organic food, which indicates that there is a demand for organic products (Sogn & Mella 2007). However, these shops sell non-certified organic products, and so one is left with a situation of buying organic by trust. Nevertheless, the interviewees claimed they could verify organic products by taste, freshness, naturalness and appearance (Sogn & Mella 2007). Obviously, identifying organic products solely by taste and appearance may be difficult, and is hardly a trustworthy way of identifying (Sogn & Mella 2007). With regard to all these aspects, Sogn and Mella (2007:1) concluded that "because of a lack of certification labels and inadequate knowledge on organic agriculture [...] these results indicate that many people may not really be consuming organic food even though they believe they are". Especially in the larger cities, 'organic by default' gets mixed up with other types of agricultural produce and it is difficult to trace the origin of the products (Sogn & Mella 2007). According to Mum's Kitchen the main problems in the market are: limited understanding of the importance of organic products by the largest part of the Tanzanian population; impassable roads especially during rainy seasons to distant sources of supply and introduction of fast foods outlets, which retract a potential group of organic consumers from regular cooking (Mjunguli 2005).

To sum up, even if the local purchasing power is low, there is a market for organic products in Tanzania. Expatriates and tourists certainly account for a substantial segment of the organic consumers (Mjunguli 2005). However, organic produce is also in demand by (often upper class) Tanzanians concerned about food safety and health benefits (Sogn & Mella 2007; Mjunguli 2005). Therefore, there is a potential for expansion of the organic market as it is currently gaining momentum and attracting attention (Mjunguli 2005). Opportunity especially lies in the large cities, where people are exposed to information, and some are well to do and educated. The urban population cannot be as sure of the quality of the food they buy from large, anonymous markets and supermarkets as the rural population who generally retrieve food from their own land or local products in nearby markets. However, for

growth in the organic market to take place, there is a need for deliberate promotional efforts focusing on awareness and accessibility (Mjunguli 2005).

### **3.5 International Market for African Organic Produce**

Unlike the domestic market in Tanzania, or the whole of Africa for that matter, the international market for organic produce is substantial (USD 54.9 billion in 2009 [Willer & Kilcher 2011]), even if it by no means can compare or compete with the market for food originating from industrial agriculture. Again, in contrast to the Tanzanian market, in the Global North, strict government legislation makes it unacceptable to sell organic by trust, i.e. without certification. In Tanzania, the certified organic products are mainly exported to the Global North, similar to the situation in the other one hundred or so Global South countries that produce certified organic products (Twarog & Vossenaar 2003). Europe represents one of the largest markets for organic produce (Vossenaar 2003), and certified organic produce from Zanzibar are often bought by German retailers (formerly the company called Zanzibar-Germany (Zanz-Germ) delivered to Germany, presently Tanzania Zanzibar Organic Producer (TAZOP) does).

Tanzania produces quite a range of organic products mainly for the export market (Mjunguli 2005), the most important of which are cotton, dried herbs, spices, coffee, black tea, vegetable oils, honey, cashew nuts, citrus, papaya, guava, mango, banana, onion, garlic and ginger (Parrott & van Elzakker 2003). Zanzibar exports certified spices and citrus. Currently, about 55.000 hectares of agricultural land in Tanzania is certified organic (Parrott *et al.* 2006). There is a potential in expanding the certified land, as supply does not meet the demand of organic products for the export market (Mjunguli 2005). However, access to the international market has been slowed down by the high costs of certification (Mjunguli 2005).

### **3.6 Possibilities and Challenges with African Organic Agriculture**

In addition to the high costs of certification, “certification requirements and regulations are pointed to as the major obstacle to a continuous and rapid development of the organic sector, especially for producers in developing countries” (Rundgren 2003a:6). Indeed, the “organic market is confronted with hundreds of private sector and government standards, a rapidly increasing number of national regulations, two international standards for organic agriculture (Codex and IFOAM) and a number of accreditation systems” (Rundgren 2003a:6). To retrieve premium prices when exporting organic food to the Global North, one must comply with the requirements and regulations developed in and for that/those countries (Rundgren 2003b). As explained in chapter 3.2, since the international organic standards are mainly developed with temperate agricultural conditions in mind, Global South farmers in tropical conditions often face requirements that are unnecessary (like the long transition period), hence losing a comparative advantage and slowing the certification process down. In addition to competing in markets with stringent quality requirements, exporters face other difficulties such as uncertain price premiums and preferences for locally produced food (Vossenaar 2003). Also, one major constraint for Global South countries with a large potential to increase certified organic agricultural production is the relatively small size of the international organic market (Vossenaar 2003).

Obviously, there are several challenges that need to be overcome for the Global South to reap the full benefits of organic agriculture. In addition to the certification and export constraints mentioned above, there are challenges with amongst others infrastructure, production, and training and extension services. However, many of these constraints are common to agricultural production and trade in general (Vossenaar 2003).

Challenges aside, there is not a lack of organisations with a strong belief in the possibilities of organic agriculture in Africa. The United Nations Conference on Trade and Development (UNCTAD) and United Nations Environmental Programme (UNEP) have stated that “organic agriculture can be more conducive to food security in Africa than most conventional

production systems, and [...] it is more likely to be sustainable in the long term” (UNCTAD & UNEP 2008:iii). UNCTAD and UNEP based this on that “[o]rganic farming can lead to increased food production – in many cases a doubling of yields has been seen” and that “organic technologies and practices [...] reduced soil erosion, conserved soil water, helped prevent soil nutrient loss, and improved soil fertility” (UNCTAD & UNEP 2008:11,33). Whereas a conversion to organic agriculture in developed countries is commonly followed by reduced yield levels, “there are many examples from developing countries where implementing organic principles - especially in marginalised areas in which subsistence farming is predominant – may result in significant increases in yields and income” (Scialabba & Hattam 2002 in Sogn & Mella 2007). Increased income is possible if receiving higher prices for organic products, if yields are increased, and if reducing purchases of external inputs (Sogn & Mella 2007).

Based on this, the potential for organic farming in improving food security is significant, as many developing countries have considerable shares of agricultural land under traditional or ‘alternative’ production methods, with little or no use of agrochemicals (Vossenaar 2003). These areas could, if changed from their ‘organic by default’ status to proper organic cultivation, experience a boost in production. Also the Food and Agriculture Organisation (FAO), as a major actor in the international agriculture scene, emphasises the potential organic agriculture has to result in economic, social and developmental benefits for the Global South (Vossenaar 2003). Surely, in the Global South, where unemployment and urban migration is high, organic farming can provide more rural jobs, as it is often more labour intensive than traditional farming. If in addition premium prices are attainable, organic farming can be an important contributor to reducing poverty as well as protecting the environment.



## 4 Study Area Description

### 4.1 Ecology and Environment of Zanzibar

Zanzibar is an archipelago situated just off the Tanzanian mainland, consisting of two main islands called Unguja and Pemba. Unguja is heavily populated with approximately 1 million people living on 2461 km<sup>2</sup> of land. It is also the island of the two, which has developed a major tourism sector, making it the focal point of this thesis. The Zanzibar environment is characterised by its tropical setting in the Indian Ocean, separated from the Tanzanian mainland by a channel of a mere 25-50 kilometres. Unguja is a flat low lying island, consisting mainly of fossilised coral rag (limestone) with dry bushy vegetation and coral beaches. Most hotels are located in the *wanda* areas (open land) which consist of porous coral rag holding little ground water (see figure 3, note that Unguja is often referred to as Zanzibar). There are some mangrove forests, and a few hydromorphic valleys characterised by lush, dense vegetation and rice cultivation. The much older Pemba broke away from the mainland around 10 million years ago. Pemba is, on the other hand, a more hilly island, and very fertile. It has been known since ancient times as the green island, as old inland and mangrove forests are abundant. Both islands are famous for their coral reefs, spice production and endemic species. The tropical coastal environment of Zanzibar is of course the major attraction for the 'sun, sea and sand' seeking tourists. But unfortunately, it is the characteristics of this environment which makes Zanzibar so vulnerable to the ecological implications that tourism brings. Small islands are in themselves fragile because of their size and isolation (Millennium Ecosystem Assessment 2005), and the environmental concerns in Zanzibar are raised by many. Myers (2005) in particular mentions air pollution, sanitation, haphazard construction, water supply, water pollution, soil toxicity, increased flooding, water-borne diseases, solid waste management and other interrelated environmental health hazards which can lead to a crisis. Also the Zanzibar Association of Tourism Investors (ZATI) takes note, writing that "[t]he proper disposal of rubbish and processing of sewerage are critical to avert environmental disaster in Zanzibar. Plastic bags litter several areas of the

island, and the water quality on some stretches of the coast where there are sewerage outflows are cause for concern” (Bishop 2008).

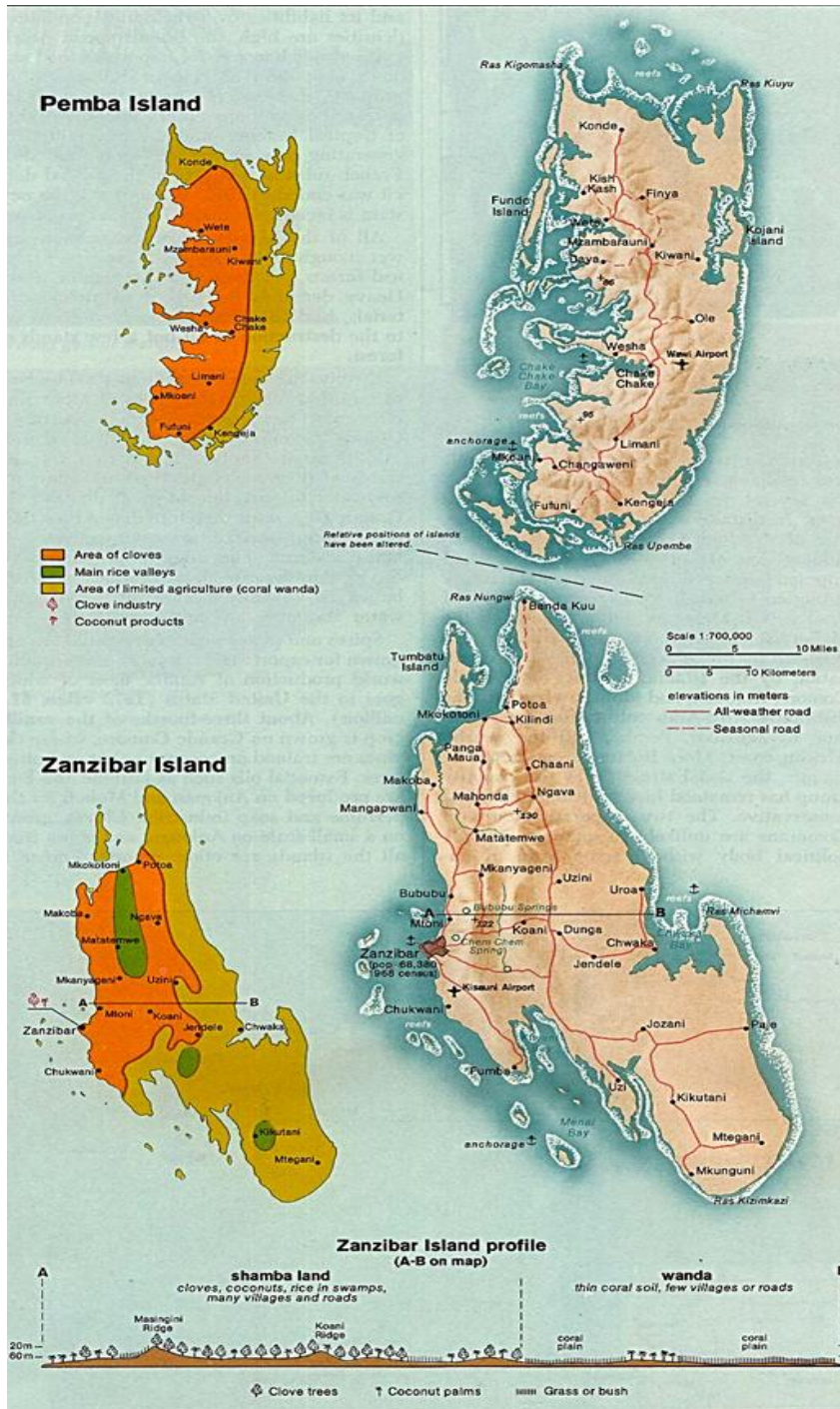


Figure 3: Map of Zanzibar Archipelago

Source: Maps of the world (2011)



The most criticised and visible of all environmental issues in Zanzibar is the problem of waste. Hadibu (2008) found that much of the blame for the production and mismanagement of waste, at least from the point of view of 75 percent of the people participating in the Pro Poor Tourism Project in Nungwi village, was to be put on the tourist industry. Much of the waste is generated from importing modern materials, packaged food, plastic bags, beverage bottles and other products from hotels and households (Hadibu 2008). Hadibu's (2008) conclusion was that the speed of waste production is high, compared with waste management processes, low awareness, and team working by all stakeholders, especially tourism investors. Islands like Zanzibar are extra vulnerable to pollution, because "[e]specially in the geology of small islands, solutions can run very rapidly resulting in contaminants travelling large distances very quickly. This is a concern in small islands as it may not be possible to protect water supplies" (Goodwin 2007). Islands often have limited water supplies due to their size, lack of major rivers or lakes, and the ground water can easily be contaminated by salt water intrusion due to over-abstraction (Falkland 1992). At the end of the hot summer in Zanzibar, which coincides with the peak of the tourist season, most wells used by locals in the wanda areas almost run dry, making water scarce and expensive until the monsoon rains fill them up again. Indeed, Gössling's (2001) study of the tourist industry's water abstraction showed that the local population are already experiencing water deficits on a daily basis. At the same time and in the same areas, exclusive hotels fill their swimming pool(s) and have no restraint on the usage of water. A few hotels recycle water for use in their gardens, but those are the exceptions and they are still major water consumers. According to Gössling (2001), withdrawals of water in 2001 were not sustainable, and with the massive increase in construction of hotels in the following years, present day withdrawals are much worse. The problem is directly related to the geology of the wanda areas, where people rely on freshwater derived from seasonal rains which are stored in less efficient aquifers, consisting of freshwater lenses floating on the underlying seawater (Gössling 2001). "The consequences of overexploitation can include the lowering of the groundwater table, land subsidence, deteriorating groundwater quality, and salt water intrusion" (Gössling 2001). The lack of sufficient water in the wanda areas where most of the hotels are located means that supply of water to the tourist zones is completely necessary. The lack of safe potable water for tourists has led to the establishment of several factories producing bottled water, bottles which when the content is consumed, litter the entire island. The overexploitation of

water in Zanzibar is affecting the resources available for local irrigation of agricultural land, water which most of the vegetable farming for the tourist industry is dependent upon. Combined with the insecurity and unreliability of the power network, which has on several occasions in the past few years been down for many months, irrigation based farming is under severe constraint.

Highly connected to the water problems in the wanda areas is sanitation. As Falkland (1992:27) points out, “[t]he ground-water resources of coral atolls and low-lying limestone islands are particularly susceptible to pollution owing to their relatively thin and highly permeable soil”. Further, “[a]s a result, the normally accepted minimum distances from sewage disposal facilities (such as pit latrines) to ground-water abstraction points are often inadequate to prevent contamination” (Falkland 1992:27). This is highly relevant to the situation in Zanzibar, as Gössling found in 2001. Many hotels had sewage systems that went into non concreted septic tanks, others piped it into caves or old wells. Obviously, inadequate treatment of sewage can further enhance the problem of availability of water by polluting already scarce resources (Goodwin 2007).

Ecotourism is a proclaimed goal of the Revolutionary Government of Zanzibar (RGOZ), but since the Environmental Management for Sustainable Development Act was drawn up in 1996, little has been done to ensure the environmental soundness of increased tourism. For example, environmental legislation regarding tourist infrastructure does not exist or is not enforced, and Environmental Impact Assessments (EIA) are hardly undertaken (Gössling 2003a). The government’s push towards luxury tourism (Myers 2005) requires huge areas of land and water resources, which is hardly compatible with environmental goals.

Together with tourism; population growth, immigration and poverty are also putting their toll on the Zanzibari ecosystem. For example, locals are clearing forests for cultivation, waste is dumped, buried or burned all around the island due to unawareness and the lack of a proper waste handling system, and sand from the beaches is removed in a large scale causing erosion. The problems are intensified because land is scarce, and the tourism sector is more developed where the population density is higher (Hadibu 2008), also causing a conflict of interest.

The degradation of the Zanzibari ecosystem is undeniably caused by a multitude of actors, but considering all these negative impacts of tourism experienced in Zanzibar, if the tourist industry remains unchecked, it is likely that the continued growth of tourism will cause greater environmental problems in fragile, vulnerable tropical islands (Gössling 2003c).

## 4.2 Agriculture on Zanzibar

Two thirds of the Zanzibari population live in rural areas and rely mostly on agriculture for subsistence production (Krain 1998). Agriculture in Zanzibar is very heterogeneous despite its small size (Krain 1998). Krain (1998) divides the islands into three major distinct agro-ecological zones, namely the coral rag area, the plantation area and the hydromorphic valleys, where correspondingly farming methods such as mixed cropping/shifting cultivation, monoculture and rice cultivation take place. This is a fairly crude division, and the plantation areas can comprise of basically monoculture stands of banana or cassava, but they can also consist of complex polyculture spice and fruit crops. The Revolutionary Government of Zanzibar presents the farmland ecosystem of Zanzibar as comprising of seven modified types. These include sugar cane estates; rain fed and irrigated rice fields; pure stand crops; complex associations of tree crops; tree crops mixed with food crops and continual rotational crops (RGOZ 1996). Major food crops cultivated in Zanzibar include rice, cassava, sweet potatoes, bananas, plantains, and yams.

Low agricultural production is common to nearly all farmer households because:

- *the hand hoe is the principal tool of soil cultivation,*
- *hardly any inputs, such as fertilizer and pesticides are used,*
- *there is little employment of hired labour for farm work, and*
- *there are severe constraints in the marketing and delivery systems of inputs and outputs (Krain 1998).*



**Picture 1: Organic agroforestry farming on coral rag land in Jambiani, Unguja**  
**Photo by: Astrid Johanne Mikidadi (2010)**

Most of the population in Zanzibar is dependent upon agriculture (Gössling 2003a), but fishing and seaweed farming are also very important means of income. The Zanzibar Strategy for Growth and Reduction of Poverty highlights low productivity in farming and fishing as a significant cause of poverty (RGOZ 2007). RGOZ policies in the 1990s were directed towards self sufficiency in food production, and the population was encouraged to adopt IPM practices (RGOZ 1996). Population growth, immigration and tourism has caused an increased demand for food which has led local people to clear more forest in the erosion-prone coral rag area. These areas have low fertility for agricultural food production and experience unpredictable rainfall. Together with the decline in fish catch due to overharvest in the area, and the loss of land due to sale for tourism use, this causes a need for local farmers to find a way to improve and secure their livelihoods.

### 4.3 Population and Settlement in Zanzibar

The Zanzibar society is a mix of people with heritage from many corners of the world. The origins of the first permanent settlers were most likely Bantu, arriving from the East African mainland 4 000 – 2 000 years ago. The Bantu tribes later adopted some customs of Arabs traders, which mix of cultures and language gradually infused to become known as Swahili (McIntyre 2006).

The multiculturalism increased, from the 10<sup>th</sup> century onwards, as small groups of immigrants from Shiraz and Persia also settled along the East African coast, especially in Zanzibar, and intermarried with earlier settlers (McIntyre 2006). The largest influx occurred in the 18<sup>th</sup> and 19<sup>th</sup> centuries, when many Arabs settled on the islands as rulers and landowners, forming an elite group. At about the same time, Indian settlers formed a merchant class. In more recent times, a large number of Africans have emigrated from mainland Tanzania<sup>5</sup>, along with a growing number of European expatriates, many of which work in the tourist industry. Additionally, some Arabs who were expelled after the 1964 Revolution<sup>6</sup> have returned to Zanzibar (McIntyre 2006).

According to the most recent census conducted in Zanzibar in 2002, the total population was close to 1 million with an average growth rate of 3 percent (NBS 2011, see table 5, highlights are emphasised). Of this, around 623 000 people, or two thirds, live on Unguja, with the greatest proportion settled in the densely populated west (McIntyre 2006). Unguja is home to Zanzibar's largest settlement, Stone Town (also called Mji Mkongwe or Zanzibar City), with around 200 000 inhabitants. Outside this and other small towns, most people live in small villages. On Pemba the overall settlement pattern is similar, with three small towns, the largest of which, Chake Chake, has a population of about 20 000 (McIntyre 2006).

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<sup>5</sup> Despite the multicultural history of Zanzibar, many Zanzibaris, in particular those who want independence from the Tanzanian mainland, perceive all or most Tanzanian mainlanders to be foreign. The distinction is especially true for the Maasais, but also for others not originating from the coastline culturally and religiously linked with the archipelago due to it previously being under control by the Sultanate of Zanzibar.

<sup>6</sup> See chapter 4.4 where this incident is noted in a brief historical overview of Zanzibar.

The urban and rural populations of Zanzibar are divided roughly equally, with considerable disparity in the standard of living, about half the population lives below the national poverty line (McIntyre 2006). Zanzibar has in place a relatively high standard of primary health care, but despite this, infant mortality is still 83 in 1.000 live births, and it is estimated that malnutrition affects one in three of the islands' people (McIntyre 2006). Compared to Tanzania mainland, the incidence of HIV/AIDS is considerably less (0.6% of the population, against the national average of around 8%), but it is on the spread (McIntyre 2006). Life expectancy at birth is only 48 years (McIntyre 2006).

**Table 5: 2002 Census Results in Brief – Zanzibar**

Male Population	480.846
Female Population	500.908
<b>Total Population</b>	<b>981.754</b>
<b>Annual Average Intercensal Growth Rate 1988-2002 Censuses</b>	<b>3%</b>
Sex Ratio (Number of Males per 100 Females)	96
Age at First Marriage (Years)	25
Population with Disability	1.5%
Child Orphans	0.4%
Widows	2.7%
<b>Literacy Rate, 5 Years and Above</b>	<b>65%</b>
Net Primary School Enrolment Rate	71%
<b>Employment In:</b>	
- <b>Agriculture</b>	<b>43%</b>
- Business Operations	30%
- Office Work	9%
- Elementary Occupations	7%
- Fishing	7%
<b>Average Household Size (Persons per Household)</b>	<b>5.2%</b>
Female Headed Households	30%
Main Materials used for Walls (Poles and Mud)	42%
Main Source of Energy for Lighting (Wick Lamp)	61%

Main Source of Energy for Cooking (Firewood)	76%
Main Source of Drinking Water (Piped Water)	69%
Main Type of Toilet Facility (Traditional Pit Latrine)	50%
No Toilet Facility	34.4%
<b>Asset Ownership by Private Households:</b>	
- Hand Hoe	<b>76%</b>
- Bicycle	45%
Average Number of Persons per Sleeping Room	2.1
In Migration:	20%

**Source: Adapted from NBS (2011)**

## 4.4 Historical, Political and Economic Context of Zanzibar

Zanzibar's strategic location along the Indian Ocean trade routes has attracted many explorers and powers to take foothold over the archipelago. The Portuguese were the first to gain control, until the Arabs took grip over Zanzibar, and held on even when the islands became a British protectorate in 1890. The Sultan of Oman moved his headquarters from Oman to Zanzibar in 1698, controlling the majority indigenous African population by segregation and aristocratic rule. The Arabs owned the many cash crop spice plantations, while Indian traders provided the credit, and African slaves functioned as the workforce. Stone Town also operated as one of the most important slave trade ports in Africa, and its trade in ivory was substantial. Zanzibar's economy based on export of cloves, slaves and ivory was very lucrative, the wealthy capital Stone Town had public street lights before London. However, when the slave trade died out in the end of the 19<sup>th</sup> century Zanzibar's prosperity demised. The succession of Sultan Khalid bin Barghash in 1896 after the death of the pro-British Sultan Hamad bin Thuwaini was not approved by the British and prompted the Anglo-Zanzibar War. This war, the shortest in history, took place when British Royal Navy destroyed the Beit al Hukum palace, and cease fire was declared 38 minutes later. Zanzibar gained independence from Britain in December 1963 as a constitutional monarchy. However, a month later, the Zanzibar revolution in 1964 marked the end of Arab minority rule. Many

Arab and Indian families fled the islands as their property was nationalised after the socialist party Chama Cha Mapinduzi (CCM) formed the Revolutionary Government of Zanzibar. Later in April, Zanzibar joined mainland Tanganyika to form the United Republic of Tanzania. Zanzibar is however semi autonomous as the islands have their own government and president. Post independence from British colonial rule, Tanzania pursued a socialist development agenda (Madsen 2003). However, due to the deep economic crisis the union faced in the late 1970s and early 1980s, as the raw material prices fell, radical economic reforms were carried out, transforming the union from having socialist plan economies to free markets (Madsen 2003). The first structural adjustment programmes, supported by the World Bank (WB) and International Monetary Fund (IMF), which began in 1986, liberalised trade and investment and offered tax breaks and other incentives to new investors (Madsen 2003).

The RGOZ has ruled in Zanzibar since the revolution, but the last elections in October 2010 gave rise to collaboration between the CCM party, and the oppositional Civic United Front (CUF). The even results and an agreement entered into before the elections led to the establishment of a Government of National Unity (GNU) (Tanzanian Affairs 2010). The tense political situation which has prevailed after the introduction of multi-party politics is now replaced with public content over the new political arrangement (IPP media 2011).

## **4.5 Tourism in Zanzibar**

Unguja has experienced a dramatic increase in tourism since the 1990s, after WB and IMF policies paved way for private and foreign investment. This led to hotels being constructed on practically all the beaches surrounding the island. These hotels cater for the approximately 135.000 tourists that visit the islands each year (Sebastian 2010). The sector provides substantial foreign exchange (Gössling 2003a), contributes about 22 percent of GDP and about 80 percent of government revenue, while still growing rapidly at an average of 9-10 percent annually (Sebastian 2010). As presented in chapter 2.2.1, according to the United Nations World Tourism Organisation (UNWTO), tourism liberalisation has the potential to deliver a series of benefits directly to poor communities in developing countries and



especially to women (UNWTO 2002 in Madsen 2003). However, the rush of tourism in Zanzibar has caused some dramatic social and environmental changes that have proved to be difficult to manage ad-hoc. Even if there are indirect benefits within transport, entertainment, construction and shopping, and roads, the harbour, the airport and access to internet and telephone networks have been improved, “[t]o the majority of local Zanzibaris, who despite rapid growth of the tourism sector still struggle to get by on less than a dollar a day, tourism development is more closely related to poverty, unemployment and social disruption” (Madsen 2003:8). The profit created from the tourist industry (believed to be much higher than the official USD 3.1 million [Gössling 2003a]) is not trickling down to the locals. According to Gössling (2003a), it is rather the government (especially the president’s office) and the investors, who are mostly foreign and especially Italian, British and South-African, which make huge profits of the industry. Tourism has also deepened the political conflict between the CCM and CUF parties as the latter perceives tourism as detrimental to the Islamic values of Zanzibar.

Once Zanzibar was opened for tourism, no major tourism framework or government agencies excised, and the development of the sector was left more or less unplanned (Maalim, A. O. 2010 personal communication<sup>7</sup>). This had severe implications for the local population, who had limited idea of the value and potential involved in the development of the tourist industry. For example, so-called land grabbing took place in coastal areas, where locals sold off land at extremely low prices, unaware of their rights to lease the land out (Madsen 2003). The result of this transaction was that “payments by the tourism industry for plots of land were not re-invested to generate an annual rent. Instead, the money disappeared rapidly and locals found themselves in a situation where they had lost access to land and financial resources” (Gössling 2003b:27). The wanda land that the tourism industry settled in, previously provided locals with space for growing coconut and fruit trees, collecting firewood and for grazing.

These days, in a well established industry, locals are still cut off as very few Zanzibaris are employed by the vast and fast growing tourist industry. Foreigners and Tanzanian

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<sup>7</sup> Affan O. Maalim is the principle secretary of the Minister of Tourism in Zanzibar.

mainlanders have taken up most direct employment opportunities. Some workers are brought to Zanzibar by foreign investors whilst others are illegal immigrants (Madsen 2003). The government has failed to provide adequate hospitality training and English education for local Zanzibaris, which means that mostly better qualified foreigners and Tanzanian mainlanders work within the industry, even fulfilling most of the lower positions. However, some paint a different picture of the situation. According to the Zanzibar Commission for Tourism (ZCT), “the growth of the tourist industry has brought tremendous benefits to the people of Zanzibar. Not only in terms of direct employment opportunities but also indirectly through *the people’s supply of agricultural produce to hotels and restaurants* and the sale of locally produced handicrafts” (Madsen 2003:3, own emphasis). Action Aid, an NGO working closely with tourism related issues in Zanzibar, has many examples to the contrary. Especially overfishing, which has become a problem due to high hotel demand, and increased food prices (Madsen 2003), has caused disadvantage for local women. The way the tourism industry has developed in Zanzibar also means that women increasingly are seeing some of their traditional income earning activities unsustainable (Madsen 2003). For example, “[w]omen were previously involved in the fishing trade as middlemen: insofar that they would buy fish at the landing stations and prepare them right there and sell them. Now this function seems to have been cut out because fishermen sell directly to the hotels. Women are left without both the fish and income” (United Nations Development Programme (UNDP) Tanzania representative in Madsen 2003:7). The large surge in food imports, which has followed the development of the tourism industry in Zanzibar, means that women find it increasingly difficult to find a market for some of their agricultural produce (Madsen 2003:7). According to Tanzania Gender Network Program’s Head of Advocacy (in Madsen 2003:7), “[w]omen are especially affected by food imports. They are the ones who used to have small poultry farms and dairy farms. Now chicken and milk is imported and there is no longer a market for women’s products”. Action Aid’s research also suggests that local women are more disadvantaged than men in the contest for indirect employment opportunities. While men typically own the means of production, e.g. land, capital, cars, boats and fishing equipment, needed to engage in the tourist industry, women do not. Often women do not even own their own time, because of domestic responsibilities and demands, and any additional income earning activity will have to be fitted into an already crowded work schedule (Madsen 2003:6). Tourism has also brought alcohol, drugs and commercial sex

workers to Zanzibar (Madsen 2003); it has entailed more corruption, as well as imposing expensive fees and permits required by anyone dealing with tourists, to the detriment of the poor local population. Because of all these aspects, many Zanzibaris are neither benefitting directly nor indirectly. However, one can come to different conclusions dependent upon whether one looks at tourism's contribution in Zanzibar from a macro or micro perspective. Most of the workers in the hotels are equally poor Tanzanian or Kenyan mainlanders, as are many of the farmers on the mainland whose produce ends up in Zanzibar. Even if the salaries in the tourist industry and the farmers' returns are low, they certainly benefit. Moreover, in Zanzibar, unlike other places in the world, tourism is not in any serious competition with agriculture over land or labour. This is because most hotels are located in the wanda areas with low fertility, and again, because most tourist workers are not from the islands. However, since it is in Zanzibar and it is Zanzibaris who have to live with tourism, it is only fair that they should experience some benefits from its presence. This is especially true when considering that the industry has drastically altered life on the archipelago, in terms of amongst others decreased accessibility to land, lower purchasing power, increased migration and an influx of tourists with cultural backgrounds very diverging from the mainly Muslim islanders.

The tourist industry was established in a difficult context. There was little or no planning concerning its development, and there was a massive lack of infrastructure. After the tourist industry had been established, a debate followed over whether Zanzibar should develop luxury-oriented conventional tourism in order to earn more foreign exchange, or more moderate but environmentally sound bungalows, guest houses and small hotels (Honey 1999). According to Honey (1999:268), "[t]here was unanimous agreement that Zanzibar no longer wanted low-budget 'backpackers' and 'low-grade hotels', which had dominated its tourism in the past". However, the final resolution of the workshop that was held warned that the government "should recognize that 'high class tourism' which follows the principles of ecotourism, and which may bring many economic benefits to Zanzibar, is frequently not produced by conventional resorts with concrete structures, television, air-conditioning etc. The 'primitive luxury' market, with simple *makuti* (palm fond) and wood structures, can command very high prices, and is often favourable to the principles of ecotourism" (Honey 1999:268-269). Nonetheless, the present government tourist policy works towards

establishing international chain hotels of high quality, which are often all-inclusive resorts. In this new context, with internationally owned hotels, it is fair to demand some corporate responsibility, even if a connection between environmental policy and tourism policy is missing (Poggioli 2008), that is, missing at least in practice. Moreover, Gössling (2003b:20) elaborates on the lack of local participation and benefits from tourism: “[t]ourism development processes in Zanzibar are top-down, with little or no involvement of local communities. [...] The discourses about the benefits of tourism are created and controlled by the government – also the major recipient of foreign exchange earnings. In contrast, local benefits have remained minor on a per capita basis and are generally very unequally distributed, which has caused multifaceted conflicts. ... [t]he contradicting views of the political parties in Zanzibar have magnified the problems surrounding tourism development”. Certainly, there is a need for the government to support policies that promote the establishment of positive links between local people and the tourism industry, and put regulations on foreign investment in the tourism sector, which can spread the benefits of tourism more widely. This “could include requiring hotel and restaurant owners to source part of their goods and services locally, employ more local people and actively protect local resources and livelihoods” (Madsen 2003:8).

# 5 Methodology

In this chapter, I will present the research strategy and -design, data collection and -analysis as well as challenges to qualitative research and ethical considerations.

## 5.1 Research Strategy

The research strategy chosen for this thesis is qualitative. The reason for this is my focus on the point of view of the participants (Bryman 2008). Since qualitative research “usually emphasizes words rather than quantification in the collection and analysis of data” (Bryman 2008:366), and “[i]n qualitative research, the perspective of those being studied – what they see as important and significant – provides the point of orientation” (Bryman 2008:292), I find it to be the appropriate strategy for this thesis. A qualitative strategy gives more focus to the contextual understanding rather than generalisation of the findings (Bryman 2008), and therefore suits this research in particular due to the specific focus on the link between the organic agricultural sector and tourist industry in Zanzibar, which includes many different actors and stakeholders in uneven numbers.

When it comes to the nature of the relationship between theory and social research, one separates between deductive reasoning, where theory guides the research, and inductive reasoning, where theory is an outcome of research. It is difficult to perform a study without any previous knowledge of other theories and studies, and both will therefore entail elements of each other, implying the use of both inductive- and deductive reasoning (Bryman 2008). To a large extent, this thesis is based on inductive reasoning, due to a lack of major research carried out on the association between the (organic) agricultural sector and the tourist industry in Zanzibar. Also, research on the tourist industry often marginalise or fail to look deeply into agricultural connections. Separately, however, the development of sustainable agriculture and impacts of tourism in developing countries are widely covered topics, which enables me to utilise deductive reasoning based on theory which may shed

light on my findings.

## 5.2 Research Design

Research design is a framework for the collection and analysis of data (Bryman 2008), and within the field of environment and development there are several to choose from. For the purpose of this study I adopt a case study design. The “most common use of the term 'case' associates the case study with a location, such as a community or organization. The emphasis tends to be upon an intensive examination of the setting” (Bryman 2008:53). However, “[u]nless a distinction of this or some other kind is drawn, it becomes impossible to distinguish the case study as a special research design, because almost any kind of research can be constructed as a case study” (Bryman 2008:54). The peculiarity of case studies lies in that “the case is an object of interest in its own right, and the researcher aims to provide an in-depth elucidation of it” (Bryman 2008:54). What distinguishes a case study from for example the similar cross-sectional design then is that “the researcher is usually concerned to elucidate the unique features of the case. This is known as an idiographic approach” (Bryman 2008:54). Case studies can utilize both quantitative and qualitative methods, but often favour the latter, because qualitative methods are viewed as particularly helpful in the generation of an intensive, detailed examination of a case (Bryman 2008). This design, which “entails detailed and intensive analysis of a single case” (Bryman 2008:52), suits my research because it is “concerned with the complexity and particular nature of the case in question” (Bryman 2008:52). Also, when a case study design is predominantly qualitative, it tends to take an inductive approach (Bryman 2008), which as previously explained fits this research. The focus on context in case studies has led to the discussion of whether the findings can be generalised, but it is not the purpose of this research design to generalise to other cases or to populations beyond the case (Bryman 2008). Remembering the distinctive context in which the research is performed, depending on the scale and scope of the research, I believe the findings can lead to theories that can be applicable or tested in other cases.

## 5.3 Data Collection

Data collection refers to the process of preparing and gathering information related to the case that is studied. It can be divided into two; primary data, which is information gathered by the researcher through for instance interviews and questionnaires, and second; secondary data, which is information gathered from other sources (Bryman 2008). Due to the research strategy and design of this study, data collected for this thesis is predominantly primary. This is due to the limited secondary data available on the specific link between organic farming and the tourist industry in Zanzibar. There are several methods for collecting primary data, but for the purpose of this study I collected data through semi-structured interviews, group interviews and observations. For the collection of secondary data, I have used articles, reports, books, brochures and the internet.

I made eight interview guides (see appendices 2-9) to guide me through the semi-structured interviews. The check list consisted of both closed and open ended questions. Many of the open ended questions had suggested answers which I could use to exemplify my question if needed, and to categorize the respondents' answers. The flexibility of semi-structured interviews with open ended questions enabled me to conduct a more informal and open conversation type of interview, therefore better understanding the issues at hand and the interviewee's own reflections and perceptions. Most of the interviews were conducted one to one, with ten exceptions (see Appendix 1: Interviews Summary, for details). My utmost focus during the research was to get the most comprehensive picture possible of the situation. Therefore, much effort was made in retrieving representatives of as many different stakeholders as possible.

To collect the primary data for this study I spent approximately 3.5 months in the field between October 2009 and February 2010. The field work was interrupted in mid-December by Christmas and a course followed at Sokione University of Agriculture in January, but resumed in February. Many of the interviews took place in Stone Town, where organisations and government offices are located. The farmers and hotels were interviewed at their respective locations, enabling me to observe the surroundings in which they operate. A few

organisations were also interviewed in Dar es Salaam on the Tanzanian mainland.

In total, I conducted 52 interviews with 14 NGOs/community based organisations (CBOs), 9 government agencies, 1 organic certification agency, 1 university/research institution, 10 organic farmers, 3 organic farming businesses, 3 organic farming groups/cooperatives and 11 sellers/users/producers/promoters of organic products, including 5 hotels/restaurants, 3 producers, 1 shop and 2 tourist operators.

All the government agencies and NGO/CBO interviews were conducted in English. This was also the case with the organic certification agency, the university/research institution and the organic farming businesses. With the exception of one (Tusife Moyo), all the interviews with hotels/restaurants, producers, shops and tourist operators were also done in English. With the exception of a few farmers, all the interviews with them and farmer groups/cooperatives were conducted in Swahili. For the most I was able to conduct the interview myself, but I used interpreters if I needed to verify what the interviewees said or if I did not understand them. Due to my variable needs for interpretation, I did not hire a professional interpreter, but rather used the guides from the organisations connected to the farmers that followed me in the field. Even if these guides were not professional interpreters or independent outsiders, I was not concerned about their correctness in translating since I was able to understand a substantial amount of what was being said.

### **5.3.1 Sampling and Data Collection Techniques**

In the initial phase of this study and as a part of preparing for the fieldwork I performed a stakeholder analysis from local- to national level to identify who to interview for the collection of primary data (see table 6). The stakeholders were identified during a painstaking process utilising internet search engines, seeking out relevant informants when travelling around Unguja, referrals from initial contacts and relevant persons chosen for me by their contact organisations. There are most certainly several stakeholders beyond these actors who hold interest and power in this context, direct and indirect, internally and externally, but which I had no access to or was unaware of, or which was outside the time frame of this study. One group of identified stakeholders, tourists, were not interviewed for this research.



Even though interviews with both tourists interested and not interested in organic products could have provided useful insight, it would have been the tourists that consciously opted for organic products who could have been most interesting for this research, counting as direct stakeholders. However, to locate and find tourists willing to be interviewed would have been quite time consuming. Also, it did not feel appropriate to ask the hotel managers if I could interview some of their guests, especially since it turned out that many of the hotels actually could not validate what was advertised on the internet: that they served organic food. The only place where tourists encounter organic produce and where I could have interviewed them without getting permission from a third party (hotels/restaurants, shops, tour operators) would have been at the market in Stone Town, where organic spices are sold at some of the stalls. But, because the producer and seller of a brand of organic spices sold at the market said that tourists do not talk about or ask for organic products, and also due to my busy schedule, this was not prioritised.

**Table 6: Stakeholders relevant to research**

NGOs/CBOs	Government agencies
Organic certification agencies	Universities/research institutions
Organic farmers	Tourists
Organic farming businesses	Hotels, restaurants, catering services, manufacturers, shops and tourist operators that sell/use/produce/promote organic products
Organic farming groups/cooperatives	

Overall, the sampling method used in this study is non-probability sampling, meaning that some of the members of the different stakeholder groups had greater chance of being selected than others (Bryman 2008). There are several types of non-probability sampling to choose from, but the one applied here was snowball sampling, where initial contacts helped me to come in touch with more informants (Bryman 2008). Sampling was conducted in a purposive way, meaning “those sampled are relevant to the research questions” (Bryman 2008:415). This sampling method is strategic since so many actors are relevant to the research, and purposive sampling focus exactly on that sample members “differ from each other in terms of key characteristics” (Bryman 2008:415). In general, for all the stakeholders, I conducted interviews until I judged that very limited new information came forward. This is

often referred to as theoretical saturation (Bryman 2008).

Farmers interviewed were chosen by the organisations that had contact with or were training them. Concerning their representability, it was clear from the interviews that they were not the top model farmers that the organisations could have used as showcases.

## **5.4 Data Analysis**

Qualitative research rapidly generates a large database because it relies on field notes, interview transcripts and documents (Bryman 2008). To analyse the data collected in the field, I therefore used grounded theory, defined as “theory that was derived from data, systematically gathered and analyzed through the research process” (Bryman 2008:541). This implies that data collection, analysis and theory all proceed at the same time “repeatedly referring back to each other” (Bryman 2008:541). Because my main focus is on words, not numbers, it becomes necessary to intertwine the different stages of the research process. However, a power shortage that lasted for three months occurred while I was at my busiest conducting interviews. This made me to a large extent unable to transcript the interviews in field. Therefore, there were some minor aspects of the research that I missed to follow up on, because they were not clear to me until I had gotten a larger overview of the data collected when I returned from the field and could transcribe. These aspects comprised of negligible missing data from a few interviews and follow up questions which could have been directed to interviewees after attaining more or disagreeing information. However, contradictory narratives occurred seldom, often being more an issue of point of view and a matter of interpretation than being in complete opposition to each other. Moreover, the few missed aspects were not of importance for the understanding of the issues at hand, and in some cases they were border lining the scope of this research.

## 5.5 Challenges to Qualitative Research

Having chosen a qualitative research approach, it is important to be aware of the strategy's weak sides and challenges, both theoretically and practically. The main critique of the qualitative research approach is that it is too subjective, difficult to replicate and generalise and that it lacks transparency (Bryman 2008). Guba and Lincoln have rejected validity, reliability, generalizability, and objectivity as criteria for judging inquiries conducted within the constructivist paradigm. They have suggested trustworthiness and authenticity as frameworks for judging the quality of studies. Trustworthiness consists of four elements: following good practice in research (credibility); ensuring that the findings hold in other contexts (transferability); keeping detailed records of the phases in the research process (dependability); and acting in good faith (confirmability). These elements parallel validity, generalizability, reliability and objectivity. In addition, by ensuring to represent all the members of a social setting (fairness); give the members a better understanding of their social setting and each other (ontological- and educative authenticity); and by empowering the members acting as a driving force to action for change (tactical- and catalytic authenticity) also the authenticity of the research can be ensured. Authenticity criteria, which focus which focus on knowing, action, and fairness, have no counterparts in the conventional research paradigm, but are primarily demonstrated through stakeholder testimony and are supported by an audit trail of evidence of fairness and authenticity (Hipps 1993, Bryman 2008).

By being aware of and following these guidelines during my research, using triangulation, and presenting in a clear way the methods applied in my thesis, I hope to be able to confirm and balance my findings so that any possible weaknesses are reduced. I will however not assume validity of my findings to other scales in time and/or space, and I do accept that my research and interpretations will be influenced by my background and choice of theory, which I believe is an honest point of view that does not imply that the research is of lesser quality.

## 5.6 Ethical Considerations

Ethical principles should be incorporated in all research to ensure its seriousness, validity and integrity. However, which guidelines are used and what is conceived as ethically acceptable differs among researchers (Bryman 2008). It therefore becomes even more important to present one's own ideals, experiences and problems related to this issue in the research as well as to be open about the issue and flexible in adapting when encountering other views during the research. Diener and Crandall (1978, in Bryman 2008) summarised ethical principles into four main areas, namely whether there is a lack of informed consent, an invasion of privacy, and if deception is involved (all related to confidentiality), and whether there is harm to participants (related to consequences, or so-called beneficence). My ethical principles concur with not conducting research which inflicts any of these negative implications on the participants.

In order to avoid any of the unwanted repercussions presented above, I informed my informants thoroughly about who I am, why I wanted information from them, how I would handle the data and what the outcome of the research would be. Most of the informants received this explanation by e-mail, giving them the time and chance to make an unrushed informed consent. It was not possible to communicate with the farmers and farmer groups/cooperatives in this way; however, I made appointments by phone with guides from associated organisations or leaders of farmer groups who followed in the field. Thereby, I was quite sure that the farmers and farmer groups/cooperatives had consented, but I still duly informed them once we met. The topic and methods of research entailed that there was an extremely limited, if any, concern over invasion of the respondents privacy. Still, it was optional for the informants to reveal their name, in case they did not feel comfortable in doing so. They could also choose not to answer questions if they did not want to. However, none felt the need to hold back their name or any other information. This was undoubtedly related to the information they received, but also due to the research topic. Because of the harmless nature of the research topic, I did not have to worry about any risks informants could have faced from participating. On the basis of this, it was unnecessary to make anonymous any of my informants name or location because it was very unlikely it would

entail any harmful consequences for them. I experienced that my honesty and explanations made the informants trust my seriousness and good intentions, as well as understand the scope of the research. Nevertheless, I did experience a great deal of inquiry towards possible benefits of my research, especially from the farmers and farmer groups/cooperatives interviewed. However, this was mainly due to expectations centred on how I could assist them to develop further, and not a wish for compensation or other types of indebtedness they could have placed upon me.



## 6 Results and Discussion

In this chapter, I will present and discuss the empirical findings of my research. To begin with, I put forward the many relevant stakeholders and investigate the rationale behind their involvement, before I assess the association between the organic agricultural and tourist sectors in Zanzibar. Further, I look deeper into the extension, practice, productivity and profitability of organic agriculture in Zanzibar. Lastly, I discuss the status quo, constraints and possibilities with the connection between organic agriculture and the tourist industry in Zanzibar.

### 6.1 Stakeholder and Network Analysis of Organic Agriculture and the Tourist Industry in Zanzibar

#### 6.1.1 Stakeholder Analysis

Table 7 summarises the main stakeholders in the organic agricultural and tourist industry sectors in Zanzibar, who were interviewed during this research<sup>8</sup>. The list does not encompass all possible actors, but I was, with three exceptions<sup>9</sup>, able to interview all stakeholders identified as relevant. The stakeholders are mainly local, place-based actors, such as organic farmers, organic farming businesses, organic farming groups/cooperatives, NGOs/CBOs and hotels, restaurants, manufacturers, shops and tourist operators that sell/use/produce/promote organic products. Other stakeholders are categorised as national non place-based actors, such as the government and their agencies, the organic certification agency, and the research/training station. Only one international non place-based actor was

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<sup>8</sup> Envirocare is left out because they have no specific programmes on Zanzibar.

<sup>9</sup> These three consisted of firstly, Imani Beach Hotel, where we did not manage to set up an interview due to our busy schedules. Secondly, I did not contact directly one organisation, Action Aid, since I had met with their farmer groups, but in retrospect, it would have been of interest to interview key staff. Thirdly, the director of Zanzibar Association of Tourism Investors (ZATI), did not reply me, and regrettably explained when we met briefly by chance that she did not see the value in meeting with me, since I was just a student and did not have a program for helping the farmers. Ironically, she also said that there was no problem, hotels were willing to buy and were buying from local farmers.

interviewed, namely the International Fund for Agriculture Development (IFAD). However, some hotels are affiliates of large international businesses, such as the Hilton. Also, three NGOs, namely Care, Association for Cooperation in Rural Areas in Africa and Latin America (ACRA) and Volunteer Services Overseas (VSO) are large international organisations which have local offices in Zanzibar.

**Table 7: Stakeholders in organic farming and the tourist industry in Zanzibar**

Type of stakeholder:	Name:	Acronyms & abbreviations:	Year established and by whom:	No. of members & farmers/beneficiaries (if applicable):	Type of activity:
NGOs/CBOs:	Organic Farming Association ( <i>Jumuiya ya UHAI Zanzibar</i> )	OFA	2002, agricultural specialists from MALE	45 members, 15 farmer group beneficiaries (50 + people)	Organise, educate, help to certify farmer groups
	Zanzibar Association for Farmers' and Fishermen's Development	ZAFFIDE	1996, technical personnel from MALE	43 members, 30 000 farmer beneficiaries	Training in FFS
	Zanzibar Development Group for Ecology and Culture	Eco & Culture NGO	1998, Haji Hafidh Haman	5000 beneficiaries	Supporting various local CBOs, including some dealing with agroforestry. Operates an organic farm showcase



Tanzania Organic Agriculture Movement	TOAM	2005		Umbrella organisation of organic stakeholders in Tanzania. Networking, coordination, facilitation, training of farmers, policy, lobby, research, extension, advisory services
International Fund for Agriculture Development <sup>10</sup>	IFAD	1977, United Nations		Training in FFS
<i>Mtandao wa vikundi vya wakulima wa Tanzania</i> (Network of Farmer Groups Tanzania)	MVIWATA	2005 (1990 mainland)	135 groups (consisting of 20-30 people), 21 networks	Network, facilitation, farmer exchange programme
Dada – mother nature’s sisters	Dada	2008, Antje Förstle (Dutch expat)	36 local female workers	Organise and teach women to produce edible and cosmetic products. Reforestation programme
<i>Umoja wa wakulima wa matunda na mboga mboga wilaya ya Magharibi</i> (Association of Fruit and Vegetable Farmers in the West District of Zanzibar)	UWAM-WIMA	2004, 14 founders: farmers and a few government workers	663 farmer beneficiaries	Training in FFS, shop/storage centre to guarantee and increase price of uncertified organic produce

<sup>10</sup> IFAD is a United Nations (UN) agency, which entails that it is not an NGO or CBO, but it is listed in this group due to its modus operandi.

	Care International Tanzania, Zanzibar Office	Care	1945	300 farmer groups, 7200 farmer beneficiaries	Women and girls livelihood and agricultural empowerment project
	Volunteer Services Overseas	VSO	1958		Research, assist other NGOs/CBOs
	Association for Cooperation in Rural Areas in Africa and Latin America	ACRA	2006 (founded 1969)		Pro-poor tourism programme. Hospitality training, environmental activity
Government agencies:	Ministry of Agriculture, Livestock and Environment	MALE			Policy, planning, extension, education, research, programmes, training in FFS
	Agricultural Services Support Programme/Agricultural Sector Development Programme – Livestock	ASSP/ASDP-L	2007, RGOZ		Training in FFS
	Plant Protection Division	PPD			Research, education, information
	Zanzibar Commission for Tourism	ZCT	1992, RGOZ		Planning, policy, marketing
	Commission for Research and Extension				Research, training in FFS
	Ministry of Tourism				Planning, policy

	<i>Duka la pembejeo</i>				Sells agricultural inputs and animal medicine
Organic certification agencies:	Tanzania Organic Certification Association	TanCert	2003, SIDA, EPOPA, Tanzanian Government		Organic certification
Universities/ research institutions:	Kizimbani Agricultural Training Institution	KATI	2007, RGOZ		Practical and theoretical agricultural training
Organic farmers:	(Farmers connected to: UWAMWIMA, Eco & Culture NGO, TAZOP, OFA)				Crop production and animal rearing
Organic farming businesses:	Kizimbani Government Spice Farm		1934, RGOZ	301 plantation workers	Research, production, spice tour for visitors
	Tanzania Zanzibar Organic Producer	TAZOP	1992, three Tanzanians and two Germans	23 farmers	Spice exporter (certified) from contracted farmers
	Zanzibar Organic Producer	ZANOP	1998, Nassor Hamad Omar		Dormant spice exporter (fair trade) from independent farmers
Organic farming groups/ cooperatives	Gando Farmer Association	GAFA	1996	3000 farmer beneficiaries	Various crop, animal rearing, honey and timber production

	<i>Jumuiya ya Wanawake na Maendeleo Wilaya ya Kaskazini</i> (Organisation for Women and Development in the North District)	JUWA-MKU	2008, initiated by Action Aid	28 farmer beneficiaries	Crop production
	<i>Jumuiya ya mtandao wa kulima wa mboga mboga na matunda mkoa wa kaskazini Pemba</i> (Network Organisation for Farming of Vegetables and Fruits in the North Region of Pemba)	JUMWAM	2006		Crop production and animal rearing
Hotels/ restaurants, manu- facturers, shops and tourist operators that sell/use/ produce/ promote organic products:	<i>Tusifé Moyo</i>		1992, 20 local women		Make and sell soaps and oils
	Zanzibar Development Group for Ecology and Culture	Eco & Culture Tours	2002, Haji Hafidh Haman		Tour operator
	Nungwi Village Beach Resort (Doubletree by Hilton)				Hotel and restaurant
	Princesses d'Unguja		2009, Patricia Lissauge (French expatriate)		Shop. Buyer and developer of organic products from contracted farmers
	Dada – mother nature's sisters	Dada	2008, Antje Förstle (Dutch expatriate)	36 local female workers	Women's cooperative making and selling edible and cosmetic products
	Karamba Resort		2007, Gemma Crespi (Spanish expatriate)		Hotel and restaurant

Chumbe Island Coral Park	CHICOP	1991		Marine conservation, education, eco-tourism. Hotel and restaurant
Kasha Boutique Hotel		2009		Hotel and restaurant
Ras Nungwi Beach Hotel		1998		Hotel and restaurant
Zanzibar Organic Spices		2003, Hassan Harouna		Produce and sell spices

### 6.1.2 Stakeholder's Rationale for Dealing with Organic Agriculture

As one can see from table 7, there are quite a number of relevant stakeholders in organic farming and the tourist industry in Zanzibar. They are involved in numerous very diverse activities, such as farming, animal rearing, production, distribution, certification, selling, marketing, networking, coordination, facilitation, training, education, information, conservation, planning, monitoring, policy making, decision making, financial support, research, hospitality, guiding etc. With all these divergent roles and places within organic agriculture and the tourist industry, it is highly interesting to see whether this variety is reflected in disparate motives and rationale, or if different actors share a common ground behind their involvement in the matter.

#### 6.1.2.1 Organic Agricultural Sector

The Zanzibari organic agricultural sector's stakeholders consist of: organic farmers, organic farming groups/cooperatives, organic farming businesses, NGOs/CBOs, universities/research institutions and governmental agencies. Organic certification agencies are definitely also a part of the scene, but since they are established as a result of organic farming's existence, it seemed futile to ask the one organic certifier interviewed, TanCert, about their motives in supporting organic agriculture. The governmental agencies and the university/research station that were interviewed are not outwardly promoting organic agriculture, but are still involved in training, research and policy making which directly or indirectly advance organic

agriculture.

The organic agricultural sector was asked about why they practice/promote organic agriculture. The farmers' answers were varied and some named multiple causes, however out of the ten farmers interviewed, sixty percent mentioned health benefits as (one of) their reason(s). Fifty percent of the farmers attributed it to training and knowledge received from various institutions. Lastly, twenty percent said it was due to environmental effects while ten percent mentioned that organic methods are good for land and pest management.

In line with the majority's health rationale, all the farmers exclusively focused on absence of *dawa* (synthetic agrochemicals), and (instead) using *mbolea* ((local) compost), when asked about what organic agriculture entails. Their focus on avoiding synthetic agrochemicals confirms the major incentive these Zanzibari farmers have for growing organically, namely the health aspect. The concern over the use of synthetic agrochemicals on the islands is well-founded, as one farmer (an agronomist tutoring at Kizimbani Agricultural Training Institution [KATI]) explained to me; in Zanzibar, some farmers heavily apply synthetic fertilisers to boost production just before public holidays, often not taking into consideration the prescribed number of days between application and harvesting, causing the vegetables to have too high levels of chemical residue. TanCert also mentioned a problem with calendar spraying, where farmers do not check the plant and if there is a need to spray before they apply synthetic pesticides. Almost all the farmers interviewed were small-scale producers, who sold their products at the market but also depended upon it for their own consumption. It is therefore logical that they would not want to apply what they perceive as hazardous synthetic agrochemicals on their own food crops. Certainly, Tanzanian consumers are concerned about food safety. Presented in the article "Tanzanians' Interest in and Access to Organic Food", Sogn and Mella (2007) found that twenty-five percent of the 130 Tanzanian mainland consumers they interviewed claimed that some food in the market may be dangerous to consume. Moreover, as many as sixty-two percent took some kind of precautions before consuming food, for example looking for the Tanzania Bureau of Standards (TBS) logo and being sure about the environment in which the food was produced. Sogn and Mella (2007) believe this is understandable because food in the local markets and in retail shops is sold without information on quality and/or shelf-life. Also, imported food is labelled in foreign

languages not comprehensible to the majority of the population, and some Tanzanians are incapable of reading labels in Swahili as well since they are illiterate.

In Zanzibar, the Kizimbani Agricultural Training Institution (KATI) provides practical training and theoretical lessons in agriculture. According to Mohamed Rashid, head master at KATI, organic farming is not the institution's focus, but it is taught indirectly because farmers cannot afford synthetic agrochemicals. Therefore, the only way KATI can see farmers improve their practice is through organic farming. The lack of funds is according to Rashid the reason why Zanzibari farmers grow organically. But he also believes that farmers understand the side effects of using synthetic agrochemicals. Rashid explains that they experience a drying out of the soil causing them to apply more and more synthetic fertilisers, further increasing the expenses. The Environment, Human Right Care and Gender Organisation (Envirocare) (1998 in Sogn & Mella 2007) found the same on the Tanzanian mainland: many farmers became poorer because they had to buy more synthetic fertilisers and pesticides every year to deal with dying soil and to overcome disease and pest resistance in the crops. Also Leonard Mtama, the manager at TanCert, believes farmers will grow organic even if the profit is lower because the price of input is low. In addition Mtama said farmers grow organically for health reasons, as they are injured by chemicals. The Kizimbani Government Spice Farm is intrinsically linked to KATI. According to Salum Rehan, the administrative farm research station manager, the plantation is organic due to research. The business trains farmers on the importance of organic farming due to health and for them to receive better price for their produce. TAZOP on the other hand, a private organic farming business, opted for organic according to managing director Khamis Issa Mohammed due to market demand but also because of environmental consciousness.

The governmental Agricultural Services Support Programme/Agricultural Sector Development Programme – Livestock (ASSP/ASDP-L) stated that farmers are not aware that organic farming has an environmental impact. However, one must separate between the use of synthetic fertilisers and synthetic pesticides. According to ASSP/ASDP-L, farmers are aware of synthetic insecticides being toxic, so farmers are more sceptical towards this type of dawa than synthetic fertilisers. ASSP/ASDP-L, like KATI, also attributes organic farming in Zanzibar to a lack of capital. They believe that the majority of farmers would use synthetic

agrochemicals if they could afford it. Actually, it is not that long ago since farmers in Zanzibar used a lot of these chemicals. According to IFAD, the Food and Agriculture Organisation (FAO) heavily subsidized synthetic fertilisers in the 1960s-70s, to the extent that farmers were throwing the content out and used the sacks as bags instead. Accordingly, as the Ministry of Agriculture, Livestock and Environment (MALE) stated, there was a problem with agrochemical waste disposal and environmental pollution. These days, accessibility is difficult, as farmers have to order synthetic inputs from MALE so that the government can test and control the types used. This long process is obviously an inconvenience for the farmers, and MALE has also made statements not to use synthetic agrochemicals. Organic farming is therefore practised, according to MALE, because it is easier, and since farmers are aware of the dangers of synthetic inputs. KATI and ASSP/ASDP-L adhere to the lack of finances explanation for why Zanzibari farmers practice organic agriculture. Certainly, the high cost of synthetic agrochemicals is stressed by many interviewees. There is no doubt that synthetic agrochemicals are very expensive for poor local farmers, costing 7000 Tanzanian shillings (TZS) per packet according to Zanzibar Association for Farmers and Fishermen Development (ZAFFIDE). However, the Organic Farming Association (OFA) further claims, in stark opposition to ASSP/ASDP-L, that even if farmers had money, they would not want to buy agrochemicals because they understand the hazards of using them. The governmental Plant Protection Division (PPD) teaches farmers about organic principles and how to make organic pesticides and fertilisers. For Ahmed Haji, a research officer at PPD, health, environment and food safety are the rationales behind promoting organic agriculture.

As many NGOs/CBOs mentioned, farmers in Zanzibar farm their small plots of land in a traditional way, closely related to organic methods. OFA, MALE, Eco & Culture NGO, *Mtandao wa vikundi vya wakulima wa Tanzania* (Network of Farmer Groups Tanzania) (MVIWATA) and *Umoja wa wakulima wa matunda na mboga mboga wilaya ya Magharibi* (Association of Fruit and Vegetable Farmers in the West District of Zanzibar) (UWAMWIMA) and ZAFFIDE all remarked that farmers follow the tradition of their ancestors by not using synthetic inputs. Even if traditional 'organic by default' farming is common and traditional in Zanzibar, all the NGOs and CBOs interviewed also listed multiple factors creating incentives for organic production, exclusively focusing on socio-economic arguments for promoting organic farming. Firstly, higher price, which can be achieved both with and without certification. Related to



this is a reduction in input costs by not using expensive synthetic agrochemicals. Secondly, market demand, which is mainly tourist operators, but who in some cases require certification of organic produce. And finally, health benefits due to avoiding synthetic agrochemicals. Surprisingly, environmental reasons for promoting organic agriculture, an aspect devoted much attention in the Global North, is not seen as an argument in itself. Rather, OFA, the only organisation that mentions environmental impacts, sees organic agriculture as an appropriate mode of farming because Zanzibar “must use land in a manner that can sustain productivity for long”, revealing a socio-economic motivation behind environmental preservation. The Gando Farmer Association (GAFA) also mentions positive economic benefits related to the environmental effects of organic farming, namely increasing the fertility of the land. However, in stating that “organic in itself conserve the environment because we are not using any chemicals” they demonstrate an environmentally based rationale.

Again, also GAFA points out that farmers cannot afford to buy synthetic agrochemicals, as well as seeds. There is no problem of accessibility, as there is a *duka la pembejeo* (agricultural supplies shop) where they can buy them. However, GAFA farmers have no experience in using industrial inputs. They therefore use local seeds, mbolea and *Marubaini* (a natural pesticide made from trees, plants and spices). But also GAFA mentions the health aspect of organic farming, saying that this type of produce is safe for consumption. Similarly, another organic farming group interviewed, *Jumuiya ya Wanawake na Maendeleo Wilaya ya Kaskazini* (Organisation for Women and Development in the North District) (JUWAMKU) from Unguja, decided to produce organically, as they did not want to become sick from synthetic chemicals. However, they differ from GAFA since they all used synthetic agrochemicals before. The JUWAMKU farmers used to buy synthetic pesticides and fertilisers from the government, but they struggled because the price was high. The farmers believe that their present organic production is an improvement, that food security is better, and finally, that organic products are safe to eat, with no effect on health like synthetic agrochemicals. Much the same, *Jumuiya ya mtandao wa kulima wa mboga mboga na matunda mkoa wa kaskazini Pemba* (Network Organisation for Farming of Vegetables and Fruits in the North Region of Pemba) (JUMWAM) said they experienced the side effect of synthetic agrochemicals, which they all were using before. However, unlike the JUWAMKU farmers, who alleged organic practices

had increased production, the JUMWAM farmers said they harvest fewer crops compared to when using synthetic agrochemicals. They stated that utilising organic inputs such as Marubaini, Neem, ash, cow urine etc is not enough, but they could see the importance of organic, and stick with it because of high cost of synthetic agrochemicals.

To sum up, many NGOs/CBOs and government agencies generally paint a picture of Zanzibari farmers practicing organic agriculture because of tradition. However, while government agencies relate organic farming to insufficient capital amongst farmers, the organisations focus on the multiple incentives present. The incentives are partly of an economic character, but mainly, it is the health benefits that provide the dominant rationale. The health rationale is echoed by the farmers and organic farming groups/cooperatives, but the latter, in turn, also mention the high cost of synthetic agrochemicals as an incentive for organic production. Interestingly, there is a clear overlap between the farmers who mentioned health with those who have received organic agricultural training or studied agriculture. Because of this overlap, and since most of these farmers had no experience with synthetic agrochemicals, it is likely that the dangers of synthetic agrochemicals to health is a narrative farmers have accepted without necessarily having experienced it themselves. None of the individual farmers stated that they practice organic because of lack of funds. This is not unexpected, because the farmers know the benefits of organic farming.

### **6.1.2.2 Organic Tourism Sector**

The organic tourism sector<sup>11</sup> in Zanzibar consists of: hotels, restaurants, shops, tour companies, NGOs/CBOs and women's groups/cooperatives. All the interviewees were identified because they directly (in one case, Chumbe Island Coral Park (CHICOP), indirectly) were selling/using/producing/promoting organic products towards tourists. Certainly, the actors in this group can also cater for non tourists such as expatriates and locals, but it is tourists who account for the vast majority of their income.

The organic tourism industry were asked why they sell/use/produce/promote organic products. Princesses d'Unguja, a tourist shop in Stone Town, sells edible and cosmetic

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<sup>11</sup> Called so because they sell/use/produce/promote organic products.

organic products. Its founder and manager, Patricia Lissauge, a French expatriate, is an active environmentalist. Therefore, for her, it is obvious to use and sell organic products because they are effective, and have no residues of synthetic agrochemicals which she believes are harmful to people's health. Also, she thinks it is natural in Zanzibar to sell organic products, and she considers it to be lucky that organic produce is available since farmers cannot afford synthetic agrochemicals. Another expatriate, Antje Förstle from the Netherlands, who is the founder of Dada, a women's group that produce and sell edible and cosmetic organic products, also stated that she deals with organic because it is her personal conviction. She believes that organic makes sense, especially when she wants to support "small people". The Dada product line builds on indigenous knowledge, but the women's group are taught cooking, hygienic and business skills so that they can also open their own business. In addition to a commitment to the local women of Matemwe village, she wanted to engage in a secure market ("people must always be fed"), selling something which could be consumed by tourists on the beach. Labelling the products organic is both for the sake of information and marketing: "of course it sells" Förstle said. Tusife Moyo, another women's group that produce and sell cosmetic organic products said that they manufacture organic products because organic is good for people's health since it is natural and without chemicals. Tusife Moyo received training and materials from the Small and Medium Enterprises Competitiveness Facility (SCF) and it was a teacher in marine sciences from Stone Town who taught them about organic. Tusife Moyo produce soaps and oil made from seaweed, coconuts, herbs and spices. They buy their products from the Zanzibar State Trading Cooperation (ZSTC), and are therefore not sure if all their products are a hundred percent organic. However, soon they will start to buy directly from a group in Pemba that they know are truly organic.

The last producer and seller interviewed, Zanzibar Organic Spices, sell their spices in Darajani, which is the fruit, vegetable, spice, fish and meat market situated in the heart of Stone Town. Darajani is often visited by tourists who purchase cheap spices to bring home. It thereby, together with the popular spice tours on plantations, provides the most direct encounter most tourists have with fresh Zanzibari agricultural products. Zanzibar Organic Spices is one of several companies which sell spices that are labelled organic in Darajani, but their spices appear in many of the stalls. Hassan Harouna, the co-founder of Zanzibar Organic Spices,

went to a short course at KATI, and teaches his suppliers about using mbolea and organic pesticides such as Marubaini, the lip stick tree, ylang ylang, and the iodine tree. Harouna decided to call his company Zanzibar Organic Spices because “when I say organic it gives more purity compared to just saying Zanzibar Spices”. Also, Harouna thought an organic label would be attractive to tourists<sup>12</sup>.



**Pictures 2-3: Dada organic food placard and Tusife Moyo organic spice products road sign in Kidoti, Unguja**  
**Photos by: Astrid Johanne Mikidadi (2010)**

Eco & Culture Tours is a supporter of organic farming for many reasons. The organic farm they sustain in Jambiani village is a part of their village tour for tourists but is made as a showcase plantation for farmers in the area<sup>13</sup>. Local farmers learn organic farming techniques from the teacher who together with Eco & Culture Tours established the farm and the villagers are also allowed to harvest from the plot. Due to a lack of precipitation that Haji Hafidh Haman, the founder and managing director of Eco & Culture Tours attribute to climate change, and a history of shifting cultivation leading to trees being cut down in the area, Eco & Culture Tours promote organic agroforestry, which Haman also believes is the cheapest form of agriculture.

<sup>12</sup> See picture of Hassan Harouna by his stall in Darajani selling organic spices on the front page.

<sup>13</sup> See picture of the farm on page 52.

All five hotels and restaurants that were interviewed shared an interest in organic products, as a part of their green or social stance, but they have had various successes in following it through. It was advertised on all of the hotels (except CHICOP) own, or on associated travel agents internet pages that they serve organic food. This was unknown to Nungwi Village Beach Resort (Doubletree by Hilton), and in fact, none of the hotels served certified organic food or could guarantee that their produce was organic. A genuine intension was there with Karamba Resort and Kasha Boutique Hotel, but they had found it difficult to put their vision into practise. Ras Nungwi Beach Hotel however, maintained that they serve organic food from their local contracted farmers.

Karamba Resort is managed by Spanish expatriates Gemma Crespi and her husband. Since he is yogi, they adhere to a natural way of life. Therefore, utilising organic produce is not a marketing scheme but the philosophy of Karamba Resort. They find it convenient to promote organic farming, because then they receive visitors who match with this philosophy, and they do not get the 'wrong' clients. Crespi explained that everything served in the restaurant is handmade and fresh, they do not precook and freeze down: "if you order chips we start to peel the potatoes". Karamba Resort wanted to develop organic farming in the adjacent Kizimkazi village, to provide the local villagers with a business in supplying organic produce to the hotel. However, the project failed as the *sheha* (the chief) did not provide land and the villagers show little interest in the venture. Also their own organic garden got destroyed during the monsoon. Similarly, the Zanzibari owners of Kasha Boutique Hotel set out with an interest in supporting local farmers and to grow some organic crops themselves, but according to the Swiss manager Peter Burri, the hotel faced major problems when opening which overshadowed this plan.

CHICOP is one of the few hotels and restaurants in Zanzibar serving exclusively the Zanzibari cuisine, allocated from nearby vegetable and fruit farmers connected to the hotel, and the market in Stone Town, thereby making it to a great extent short-travelled. CHICOP receive great reviews from their clientele over the Zanzibari cuisine, demonstrating that the tourist industry does not necessarily have to serve European or American food. CHICOP has won several awards for its marine park eco-tourism, and they perceive organic to be one of the aspects in eco-tourism. Even so, according to Godfrey Mloka, the lodge manager at CHICOP,

CHICOP did not really think about presenting their food as organic. However, it is not a lack of interest, much like the other hotels interviewed, as Mloka said: “if there was enough organic food here from Zanzibar it would be really wonderful for our project”.

The general manager at Nungwi Village Beach Resort (Doubletree by Hilton), Kenyan Imtyaz Mirza, consider organic to have an additional value, and to be better for the environment. He said that as a hotel and hotel chain they would fully support organic farming but that they need to check the produce to see whether it is truly organic. Furthermore, he would not feel comfortable in writing organic on the menus unless the food was certified. Also, Mirza would want organic to be an option in the menus, so customers could choose between the same dish cooked with organic and with non-organic produce. Unaware of that several travel agents internet pages stated that the hotel’s “food are freshly prepared and combined mainly from organic foods, especially fruits and vegetables which are derived freshly from *our own plantations* hence ensuring a healthy diet” (Zanzibar Magic 2009, own emphasis), Mirza could not verify that this was the case nor did he know which plantations they referred to.

The only hotel interviewed then, which persisted that they truly rely on organic produce was Ras Nungwi Beach Hotel. According to German general manager Angelika Hoose, this hotel is focusing on being eco-friendly, and believes serving organic food is a part of that. In addition to Ras Nungwi Beach Hotel, there were four others out of the ten interviewees: Princesses d’Unguja, Dada, Zanzibar Organic Spices and Eco & Culture Tours, who could to a considerable extent *personally* verify that their supply/produce was in fact organic.

To sum up, some organic tourism operators are motivated to deal with organic products by their personal conviction. Some of these operators stress, like most of the organic agricultural sector, the health benefits of organic farming. Several operators consider organic products to be a part of the whole eco-tourism package or their programme to support locals, but for many their ‘good intentions’ have been halted or they for several reasons only partly follow it through. Still, they nonetheless advertise that they serve local organic food. Some operators were also motivated by the value organic can have in marketing, and one operator seems to have been a ‘victim’ of an associate greenwashing their product. Almost all the

organic tourism sector interviewees however came across as committed to supporting both the livelihoods of local people in Zanzibar and organic production.

### **6.1.3 Network Analysis**

Interestingly, many of the fifty-two actors interviewed for this research were only acquainted with a few other stakeholders and some knew little or nothing about most other actors. Table 8 gives an indication of which groups are connected to each other, while table 9 presents the main links between the individual stakeholders. The number of stakeholders is not evenly distributed amongst the groups. Therefore, it is unwarranted to compare the magnitude of interactions because the level of connections is partly related to how many actors there are within a group. Even though, it is of interest to note that many different stakeholders tend to mainly connect within their group. This is especially the case for government agencies and NGOs/CBOs, which share an extensive collaboration both within their own group but also with each other. Moreover, organic farming groups/cooperatives and organic farmers are highly connected to NGOs/CBOs. The university/research institution is only connected to the fellow government bodies MALE and the Kizimbani government spice farm, while organic farming businesses are linked to almost all groups of stakeholders. The organic certification agency, TanCert, has been contacted by the Kizimbani government spice farm and GAFA for certification, but the processes are still in their initial stage. A very important point is that the organic tourism sector lacks linkages with almost all other groups of stakeholders (except Eco & Culture Tours with Eco & Culture NGO, but they are affiliates in the same establishment). Certainly, there is a connection between local organic farmers and the tourist industry as the latter purchases produce from the former. But this transaction is mainly done through middlemen and the market, so it does not constitute as a direct link. In addition, at the market the local organic produce gets mixed up with mostly non-organic produce from the Tanzanian mainland, which further decreases the linkage. However, a few actors in the organic tourism sector stated that they (partly) buy produce directly from contracted/associated organic farmers. These actors, Princesses d'Unguja, Dada, Zanzibar Organic Spices, CHICOP and Ras Nungwi Beach Hotel are rare exceptions in a tourist industry which to a large extent relies on middlemen and imported foodstuffs.

**Table 8: Connections between stakeholder groups in organic farming and the organic tourism sector in Zanzibar<sup>14</sup>**

	NGOs/ CBOs	Government agencies	Organic certification agencies	Universities/ research institutions	Organic farming businesses	Organic farming groups/ cooperatives	Organic farmers	Organic tourism sector
NGOs/CBOs	✓	✓	✓		✓	✓	✓	✓
Government agencies	✓	✓		✓	✓		✓	
Organic certification agencies	✓				✓	✓	✓	
Universities/ research institutions		✓			✓		✓	
Organic farming businesses	✓	✓	✓	✓	✓	✓	✓	
Organic farming groups/ cooperatives	✓		✓		✓		✓	
Organic farmers	✓	✓	✓	✓	✓	✓	✓	✓
Organic tourism sector	✓						✓	✓

<sup>14</sup> The table is based on information given during interviews, and may not be totally complete. Further connections exist, however they are not included here if they do not have a direct stake in the correlation between organic farming and tourism in Zanzibar. For example, there is a link between two organic certification agencies, IMO and TanCert, but IMO is only involved in certification in Zanzibar for international export.



**Table 9: Main links in the network between organic farming and the organic tourism sector in Zanzibar<sup>15</sup>**

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<b>NGOs/CBOs:</b>	
ACRA:	VSO
Action Aid:	UWAMWIMA, JUMWAM, JUWAMKU
CARE:	UWAMWIMA, VSO, MALE
Eco & Culture NGO:	Organic farmers, Eco & Culture Tours
IFAD:	UWAMWIMA, TOAM, MVIWATA, PPD
MVIWATA:	IFAD, UWAMWIMA
OFA:	TOAM, MALE, TanCert, GAFA, Organic farmers
TOAM:	IFAD, OFA, MALE, PPD, TAZOP, GAFA
UWAMWIMA:	ZAFFIDE, VSO, Action Aid, MVIWATA, IFAD, CARE, ASSP, JUMWAM, Organic farmers
VSO:	UWAMWIMA, CARE, ACRA, ZAFFIDE
ZAFFIDE:	VSO, UWAMWIMA, MALE
ZATI:	Ministry of Tourism, ZCT
<b>Government Agencies:</b>	
ASSP:	UWAMWIMA
MALE:	CARE, TOAM, OFA, ZAFFIDE, PPD, ZCT, ASSP, Ministry of Tourism
Ministry of Tourism:	ZATI, ZCT, MALE
PPD:	TOAM, IFAD, MALE
ZCT:	ZATI, MALE
<b>Organic Certification Agencies:</b>	
TanCert:	OFA, Kizimbani Government Spice Farm, GAFA
<b>Universities/Research Institutions:</b>	
KATI:	MALE, Kizimbani Government Spice Farm
<b>Organic Farming Businesses:</b>	
Kizimbani government spice farm:	MALE, TanCert, KATI
TAZOP:	TOAM, ZANOP, GAFA, Organic farmers
ZANOP:	TAZOP
<b>Organic Farming Groups/Cooperatives:</b>	
GAFA:	OFA, TanCert, TAZOP
JUMWAM:	Action Aid, UWAMWIMA
JUWAMKU:	Action Aid
<b>Organic Farmers:</b>	
Organic farmers:	Eco & Culture NGO, UWAMWIMA, OFA, TAZOP, Organic farmers
<b>Hotels/Restaurants, Manufacturers and Tourist Operators that Sell/Use/Produce/Promote Organic Products:</b>	
CHICOP:	Tusife Moyo
Eco & Culture Tours:	Eco & Culture NGO
Tusife Moyo:	CHICOP

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<sup>15</sup> The table is based on information given during interviews, and may not be totally complete. Also, connections may in some cases exist on an informal or personal level, instead of or in addition to on an official, institutional level. Only interviewees, and those of which are directly interlinked with others are included in this table.

## 6.2 Extension, Practice, Productivity and Profitability of Organic Agriculture in Zanzibar

### 6.2.1 Extension of Traditional ('Organic by Default') and Organic Agriculture

According to Mohamed Rashid, head master at KATI, almost all farmers in Zanzibar practice organic agriculture except rice producers and some vegetable farmers that use herbicide. Mwatima Juma, the Tanzanian representative at IFAD, and Juma Ali Juma, an agricultural development officer and coordinator for Zanzibar Food Security and Nutritional Programmes at MALE, affirmed that synthetic fertilisers and pesticides are only utilized on rice. Many other interviewees also confirmed that unlike the Tanzanian mainland, where the use of synthetic agrochemicals is widespread, in Zanzibar it is a rarity. With a population in 2002 of about 1 million people, 43 percent of which are farmers (NBS 2011), it is reasonable to assume that approximately 400.000 people are involved in traditional ('organic by default') or organic farming. Indeed, Abdulla Mohamed Mmanga, the executive secretary at OFA, claimed that in addition to not using synthetic agrochemicals, most farmers follow near all the principles of organic farming such as mulching, and using organic manure and pesticides. However, according to Rashid, although Zanzibari farmers hardly use synthetic agrochemicals, and most know how to use organic fertilisers and pesticides, farmers are not aware that the way they are producing is a specific type of agriculture (i.e. organic). Even out of the ten organic farmers interviewed, twenty percent were not clearly familiar with the Swahili term for organic agriculture, *kilimo hai*, but in the end, all gave an explanation of organic agriculture entails. Obviously, the insight these few trained organic farmers have is not representative of the knowledge the average traditional Zanzibari farmer possesses about organic farming. It seems unlikely then that *kilimo hai* is a term that all Zanzibari organic farmers are acquainted with, when it is unrecognizable even to some trained and also certified in organic practices. Possibly the phrasing itself is unclear, directly translating to 'agriculture life', since it does not specify this type of agriculture to be environmentally- or health friendly, but rather links the mode of farming to the holistic and all-encompassing word 'life'. However, being unfamiliar with the term *kilimo hai* does not automatically mean that farmers do not know organic farming entails. Still, it possibly reveals that the level of

awareness concerning organic is low. As presented in chapter 6.1.2.1, when asked about what organic agriculture is, all the organic farmers interviewed focused exclusively on the absence of dawa, and (instead) using mbolea. Recalling the definition of organic agriculture from chapter 2.1.1, the quite limited understanding these ten trained organic farmers have, two of whom were certified, is coherent with the general foundation organic agriculture has in Zanzibar; namely being based on traditional farming methods. The traditional mode of farming in Zanzibar can be very similar to organic farming, which is surely what has led the agriculture on the islands to be described as 'organic by default'. Certainly, all the farmers interviewed had learnt for them new skills such as using mbolea and making organic pesticides, however, these techniques are also embedded in traditional Zanzibari agriculture. Therefore, in some cases it was very difficult to differentiate the interviewed farmers between traditional 'organic by default' and organic, without further information on their practices other than what they themselves portrayed.

### **6.2.2 Practice, Productivity and Profitability of Traditional ('Organic by Default') and Organic Agriculture**

The problems within Zanzibari agriculture are many. The organic farmers, organic farmer groups/cooperatives and organic farming businesses mentioned: low productivity, seasonality, small plots, reliance on middlemen who push their profit down, market constraints, price fluctuations, lack of capital to buy (expensive) inputs, equipment and hire labour, maintaining quality in post-harvesting storage, limited water supply, tough coral rag land, pests and diseases, wild and domestic animals eating their produce and climatic conditions. NGOs/CBOs, government agencies and the university/research institution added: shortage of agricultural land, limited value adding processing, low status of farming, farmers cultivate for subsistence/farmers not considering agriculture as a business/agriculture is not commercialised, irregular and inadequate supply, limited high and consistent quality and unsuitability of growing many of the crops in demand. Most if not all of these problems are not specific to the organic farming these actors partake in, but to agriculture in general.

As established in chapter 6.1.2.1, farmers in Zanzibar practice traditional ('organic by default') and organic farming due to custom, health, training and finances. Incentives like higher

productivity and profitability is hardly mentioned by the organic farming sector. Manager and inspection officer at TanCert, Leonard Mtama, explains that when farmers who practice industrial farming receive training in organic production they stop to use synthetic pesticides before they convert completely. Therefore the farmers accept an immediate drop in production. According to Mtama, when farmers compare the drop of quantity with the side effect of chemicals on health and sustainability, they think organic is better. Furthermore, Mtama said that unlike in Europe, when farmers convert to organic here, production instantly goes up. Two of the organic farming groups/cooperatives interviewed for this research formerly used synthetic agrochemicals. As presented in chapter 6.1.2.1, the JUWAMKU farmers experienced an increase in both quality and quantity when they changed to organic production, and therefore, their food security became better. On the other side, the JUMWAM farmers said the quality of the crops were better with organic, but that they harvest fewer crops compared to when using synthetic agrochemicals. One reason for this difference could be that unlike the JUWAMKU farmers, who made their own organic boosters and pesticides, the JUMWAM group only used traditional Zanzibari organic pesticides such as Marubaini, Neem, ash and cow urine. This was related to the difference in training the two groups had received, even though both groups were funded and trained by Action Aid, and JUMWAM was established in 2006, two years before JUWAMKU, the former had only received training at a three day seminar while the latter was still being trained by their leader.

Also for the individual farmers interviewed, knowledge on how to make organic fertilisers and pesticides seemed to be an important contributing factor to the increase in quality and quantity of their produce many had experienced after turning organic. According to GAFA, using aromatic plants, herbs and leaves as organic pesticide is old knowledge, but a lot of people do not know how to make or use it, and need training. Correspondingly, Aziza Seif, an extension officer from MALE said that all Zanzibari farmers know how to use Marubaini and Neem, but only when they receive training farmers they will know how to mix it with spice. PPD has been an important actor in spreading knowledge on how to make organic pesticide, by teaching farmers and publishing brochures in Swahili showing step-by-step how to make *dawa ya asili* (bio-pesticide). Out of the ten farmers interviewed, thirty percent mentioned that insects cause problems on their farms. Coincidentally, these were the same farmers that out of the ten had received training from PPD. That being said, one farmer, Almas Sudi, who

complained about insects, attributed the increase in quality and quantity of his produce precisely to the knowledge he had obtained from PPD. Also, Sudi mentioned that he struggled to have enough money to buy bio-pesticide from PPD, which he still did even though he knew how to make it. Two other farmers, Bishara Zamu Ali and Salma Muksini, both attended the same farmer field schools (FFS) organised through TOAM and UWAMWIMA. They made their own bio-pesticide from Marubaini and spices, but struggled because they were only able to make small quantities due to lack of capital. Also, they could not afford sprayers which they needed to apply the concoction on their fields. If they had enough money however, they would want to make a business out of producing and selling bio-pesticides. There is certainly a market for bio-pesticides, and according to JUWAMKU, there are no shops that sell dawa ya asili.



**Picture 4: JUWAMKU organic vegetable farmer group in Donge Mnyimbi, Unguja, show their homemade organic boosters and pesticides**

**Photo by: Astrid Johanne Mikidadi (2010)**

In addition to bio-pesticides, many organic farmers and farmer groups/cooperatives had learnt how to use bio-fertilisers such as manure and compost. According to farmer Salama Mwinyihaji, farmers in Zanzibar do not use compost without knowing about kilimo hai. The JUWAMKU farmers also said that they previously did not know how to make compost; before they used to burn the grass, now they use it to make mbolea. Almas Sudi, the farmer mentioned above, said it had helped him a lot to use manure which he bought locally from chicken, cows and goats. It is not very common for Zanzibari farmers to keep cattle, however some have a few chicken, even fewer have goats. Out of the ten farmers interviewed for this research, seventy percent had no animals, while ten percent had chicken, another ten percent had chicken and cows and the last ten percent had chicken and goats. The limited number of animals is a constraint on the availability of manure, which leads to it being relatively expensive. The JUMWAM farmers stated that before they became organic, nobody knew how to use manure, and that generally in Pemba, very few know how to use it. This is verified by GAFA, who said that even with free grazing, nobody would collect manure to apply on their land. Also according to Haji Saleh, the interim chair person at OFA, there are some who keep livestock who do not utilize this resource. However, Saleh stated that using manure is old knowledge in Zanzibar, this is confirmed by MVIWATA, who explained about an old system in the south of Unguja, where farmers keep their own or hired cattle from non-grazing areas to graze at their land for three months. Thereafter they would shift the animals to another location. In this way they would increase the fertility of their land.

To sum up so far, there seems to be a difference in opinion on how widespread the use of organic fertiliser and pesticides are. Interviewees are unanimous in stating that the use of mbolea and dawa ya asili have long roots in Zanzibari agriculture. However, unlike what Abdulla Mohamed Mmanga from OFA and Mohamed Rashid from KATI stated in chapter 6.2.1, most farmers and farmer groups/cooperatives say that actually using these inputs is not very common, its use is connected to if farmers are trained or have knowledge on kilimo hai. Indeed, according to Foum Galu, a farmer and agronomist who teaches at KATI, many farmers do not know how to make compost. Moreover, Galu stressed that many farmers who use manure do not know how to conserve it, as they leave the manure in the sun, making it lose its nitrogen.

According to Haji Saleh at OFA, many farmers say to OFA that they are already organic because they are not using synthetic agrochemicals and because they use manure. However, as Saleh commented, that does not make them organic farmers. Especially when a persistent problem is that rubbish, plastic and batteries are not disposed of properly and gets mixed up with the manure and compost that farmers use. In line with this, the differences in depth of understanding amongst the interviewees concerning what organic agriculture entails became very clear, as the JUWAMKU farmers stood out as very aware. They were concerned about which type of fodder the chickens they got their manure from ate, and wanted to talk to the owner to make sure, as it might contain chemicals. The shop manager in a duka la pembejeo in the central district of Zanzibar, Mzee Joka Haji, explained that chickens in Zanzibar are in fact full of dawa. Haji said that the government is actually telling people not to chew on chicken bones because of the chemicals they contain. Even if Haji insists that it is the chickens from poultry farms who are treated with dawa, his village shop mostly consists of a variety of veterinary medicine. Many of the duka la pembejeos are privately run but lie under the governmental Participatory Agricultural Development and Empowerment Project (PADEP). PADEP gave Haji capital to build the shop and for its first consignment. In these shops, Urea fertiliser is subsidised by the government, costing 600 TZS per packet compared to 1000 TZS in other shops. Haji says that he is free to sell which ever inputs he wants, and that he thinks it is better to use organic inputs, but that it is his business to sell chemicals. His turnover is quite good, as there are a lot of business vegetable farmers around that buy synthetic fertilisers, booster and pesticides from him. Haji explains that because few farmers have animals in this area, they use chemical fertilisers. Also they do not have the amount of time needed to leave the land for animals to fertilise it. However, there are a lot of farmers that come to ask for untreated maize seeds. Haji attributes this to a disadvantage with treated maize: if they stay for a long time they do not germinate. Moreover, he has been told by farmers that during heavy rains the treated seeds rotten, especially bell peppers.

According to Mjunguli (2005), in Tanzania, availability of organic inputs, such as seeds, is questionable. A vital agricultural input, is difficult to acquire seeds which has not been treated with insecticide or fungicide. This is certainly the case in Haji's duka la pembejeo. Even some of the organic farmers interviewed revealed that they use these seeds. When interviewing one farmer, Haji Omar Bhai, I noticed an empty can of East African Seeds,

treated with fungicide. Bhai stated that he buys these every season, but that he plans to start to use his own seeds because he realized that he can take seeds from his own plants, and because the ones he buys contains poison. Again, the JUWAMKU farmers proved to be the exception, they purchased Mkulima Seeds, which are not treated. On the other side, GAFA, one of the two farmer groups/cooperatives in Pemba, stated that they relied on local seeds, as it was too expensive to buy from the duka la pembejeo, while the other, JUMWAM, said that they produced seeds within the group and sold to each other.

Availability of organic inputs such as bio-pesticide, compost, manure and seeds is not the only challenge to organic agriculture in Zanzibar. Other issues mentioned by the organic agriculture sector are related to marketing. They include the high cost of organic certification, no copyright on labelling produce organic and organic produce getting mixed up with industrial farming produce in the markets. Moreover, according to Haji Saleh, research officer at MALE and interim chair person at OFA, a major constraint is that there is no government programme designed specifically to promote organic. Saleh stated that there is a shortcoming in the agricultural policy as it does not explicitly recommend organic while the intention is to promote it. According to Saleh, the policy “is a collection of good words”, and has little foundation in what is taking place in the field. Certainly the lack of focus on organic in the policy seems partly incompatible with what is being practiced. On the one side, government agencies and projects such as PPD, ASSP/ASDP-L and KATI, some MALE extension officers and government officials involved in NGOs/CBOs, all promote organic farming. While on the other side, the government is still supporting through PADEP the establishment of agricultural supply shops which only retail synthetic agrochemicals, some of which are greatly subsidised. According to Juma Ali Juma, agricultural development officer and coordinator for Zanzibar Food Security and Nutritional Programmes, the agricultural policy is not mentioning organic, only sustainable farming. It is concerned with increasing quality, creating good standards and commercialising agriculture. However, according to Juma, in revising the agricultural policy, “organic will be one of the strategies, definitely”.

### **6.2.3 Extension of Certified Organic Agriculture**

In Zanzibar, the number of certified organic farmers is low. According to Juma Ali Juma at



MALE, only cloves from ZSTC and spice and citrus from TAZOP are certified in Zanzibar. TAZOP buys produce from 250 farmers in Tanzania, twenty-six of who are in Unguja and Pemba. Two of the interviewees for this research were TAZOP farmers, cultivating citrus and cloves respectively. TAZOP is only interested in the products that are in demand in the international market. The farmers also grow for example maize and beans for themselves, according to TAZOPs managing director Khamis Issa Mohammed because they have to eat healthy and safe food and since they practice crop rotation this extra production is a benefit. These crops are implicitly certified since they are grown on the same land as the spices and citrus, and so they also have to be cultivated organically. If farmers do not follow the same international standard on all their crops, independently of if they are cultivated for TAZOP or not, they are penalised for violation of the standards by needing to go through a convention period of two to three years. TAZOP also has its own 'internal standard': if a farmer does not supply to TAZOP for two to three years then the company drops him/her. Mohammed said they have given the farmers this long time since the farmers can experience seasonal changes. Nonetheless, the farmers in Unguja and Pemba all deliver every season; however, some keep TAZOP as an alternative market. TAZOP does not have a binding contract on how much the farmers have to supply to them, only a binding farming agreement. Mohamed Saleh Ali, a citrus farmer for TAZOP, to a certain extent verifies this procedure in saying that farmers are not abided to sell only to TAZOP, if TAZOP fails to buy he can sell to others. GAFA in Pemba, then called Njia Moja, supplied certified produce to TAZOP between 1996 and 2001. In stark contrast to what TAZOP and their farmers in Unguja stated, GAFA complained of the monopoly like market conditions with both TAZOP and ZSTC, GAFA supplying to the latter in 2002 to 2004. This is certainly the case with ZSTC, as all transaction of cloves, a major crop in Zanzibar, has to go through this governmental agency. Even TAZOP have to purchase cloves from their farmers via ZSTC. Obviously, a commitment from the farmers to supply to TAZOP is necessary since it owns the certificate and pays for all certification costs. This type of arrangement is standard in Zanzibar, as the typical *shamba* (farm) on the islands is small. Even for TAZOP farmers who generally have larger shambas compared to the Zanzibari average, it would not be feasible for most of them to attain their own certification due to the high costs involved.

At the time of research, TanCert was yet to certify farmers in Zanzibar, but it had made

attempts to certify organic farmer groups. TanCert had however certified Zanzibar Recyclers Company (ZAREC), which produce organic compost out of food waste, mostly sending it to the mainland. Leonard Mtama, the manager as well as inspection officer, works together with Christian Shoo, an inspection officer, at TanCert. They confirmed that in Tanzania and Zanzibar, the organic certification process is pushed by export, and that exporters such as TAZOP are only interested in coffee and spice. But according to Mtama, there are many other crops that could be certified, and there is no need for an initial company to provide farmers with the certification. Indeed TanCert certified a cotton group on the Tanzanian mainland “from scratch”. Mtama believes that “farmers can organize themselves, if they do it well, there is no problem, TAZOP is getting money from the same bank as the farmers could”. However, according to Mtama, “no one is telling the farmers because the operators [the companies who export] will lose”. But Mtama is seeing that farming groups and projects are growing, getting their inspiration from organic practices.

#### **6.2.4 Practice, Productivity and Profitability of Certified Organic Agriculture**

As established above, the high cost of certification is a major constraint to the expansion of certified organic farming in Zanzibar. With the establishment of the local Tanzanian certifier TanCert, the expense is somewhat reduced. The decreased price compared to international certifiers is mainly related to the reduction in travel costs. In addition to this cost, and a fixed fee of 400-500 EURO, expenditure is determined by size of land, the number of farmers and the number of days in the field. For TAZOP, who is certified by IMO, the small plots farmers have in Zanzibar cause several related problems. TAZOP needs at least two tonnes per consignment for export. Because of the small plots, sometimes the farmers cannot fulfil the demand. Therefore, TAZOP has to drop farmers if they cannot produce enough. TAZOP cannot just add more and more farmers to their supply list to ensure the quantity, because of the expensive control system. The more farmers, the higher the costs. In this way, smallholder farmers in Zanzibar are disadvantaged compared to the TAZOP farmers with large plots in Tanga, Kigoma and Morogoro on the Tanzanian mainland.

The two TAZOP farmers interviewed both mentioned that the price they receive is low and

that it is subject to fluctuations. Indeed, according to the managing director of TAZOP, Khamis Issa Mohammed, there are two reasons for why the price for organic products has gone down in the last few years. Firstly, Mohammed explained that when TAZOP started in 1992, the premium price was a hundred percent, while now it only covers the certification. According to Jordan Gama, executive secretary at TOAM, the reason for the decline in premium is because of an increase in supply of organic produce. Still, Mohammed believed organic had an advantage, because if organic spices and industrially produced spices cost the same, people will choose organic. Secondly, due to the global financial crisis, TAZOP's German importer collapsed and the prices for organic products went down. This led TAZOP in 2008 to establish a new importer and distributor based in Switzerland called Zanzibar Spice AG, which became certified and fully operational in 2010. Therefore, according to Mohammed, farmers do not get a better price for growing organically, and sometimes they will sell a small amount of their total produce at the market if the price there is higher. The farmers can do this because, like explained in chapter 6.2.3, they do not have a binding contract with TAZOP on the amount they need to supply. The price is also determined by several other aspects. If TAZOP has an annual contract with an importer, then the price the farmer receives is fixed whether or not the price goes up or down. However, according to Mohammed, in the rare circumstances that TAZOP has purchased the produce before they get an offer from an importer, the company will always go back to the farmers and discuss the price. The company pays the farmers in cash, but sometimes they have to wait to receive their money until TAZOP has sold the produce, "this is one of the negative sides of the company" Mohammed said. Finally, middlemen also determine the price. TAZOP always pays more than the middlemen, as Mohammed said, TAZOP minimises their own profit rather than for the farmers. This is confirmed by Saidi Ali Juma, a clove farmer for TAZOP, who said that after he sells his cloves to ZSTC, he gets a top up from TAZOP. TAZOP's dedication to their farmers is confirmed by Haji Saleh at MALE and OFA, in saying that Mohammed is "very genuine, he helps the farmers".

According to Leonard Mtama, the manager at TanCert, there is little knowledge of TanCert amongst farmers. The only farmers that know are the few organic farmers that are producing organic in high quantity, and those that are connected to an organic farming business. Mtama said that many would like to produce organic crops on the mainland as the premium

is ten to twenty percent on the prevailing market value. However, according to Mtama, “many farmers believe what they are producing is naturally organic so why put extra cost on it”. Further, “people might understand there is an extra value but not much is produced and it is expensive”. Also, farmers are put off by the magnitude of requirements, which has lead TanCert to not post the requirements on their web-page, as potential clients will step back and say that they cannot comply with it. Even though certification is fairly new in Tanzania, according to Mtama, many people enquire about it.

TanCert operates with two standards, one for the local and regional market, called the East African standard (EAS), and one for the international market, the export standard. TanCert is however working to get the EAS accepted in the European Union, and Mtama is certain that they will succeed. But the road ahead is long, because as Mtama said, it is difficult for TanCert to gain the credibility necessary for consumers in Europe to trust the company. Even after TanCert was established, importers still choose to use more expensive, but well-known certifiers like IMO when importing from Tanzania. However, IMO is collaborating with TanCert, and use their certifying inspectors.

To sum up, there seems to be a slight economic gain for Zanzibari farmers to be certified through an organic farming business. Mohamed Saleh Ali, a TAZOP citrus farmer, said that after he got certified, he acquired a lorry and a fish pond, which he said he could not have done without being certified. Also, Ali said that one bag of 200 lemons that he sells to TAZOP for 1000 TZS would only fetch 500 TZS at the local market. However, according to Mtama at TanCert, if the farmers own their own certificate it is more profitable. Mohammed at TAZOP believes it has less to do with being certified organic or not and more to do with contracted farmers in general, who have a secured market. He stressed that TAZOP is always with the farmer through the processes of training, inspection and purchasing. According to Mohammed, this gives them hope and makes them invest in what they are doing, and so their welfare is improved.

### **6.3 Status Quo, Constraints and Possibilities with the Connection between Organic Agriculture and the Tourist Industry in Zanzibar**

Independently, the organic agriculture and tourism sectors in Zanzibar are both well established and growing. However, even if the tourist industry depends on agricultural products, the link with the agricultural sector in Zanzibar is, as established, inferior. Indeed, Dr. Islam S. Salum, the director of policy and planning at MALE, stated that thirty to forty percent of the vegetables consumed in the hotels come from outside of Zanzibar. Furthermore, according to Kenneth R. Wood, a VSO study from 2003 showed that eighty percent of the food consumed in the hotels is from the mainland. Wood commented that this study might not be one hundred percent accurate; however there is no doubt that a vast amount of the agricultural products the tourist industry obtains originates from elsewhere than Zanzibar. There are several reasons for this lack of association between the two sectors, amongst others related to the specifics of Zanzibari agriculture and climatic conditions, the market structure for agricultural produce, the isolated development of the tourist industry, the low interest in showcasing Zanzibari culture and cuisine by the internationally owned and managed tourist hotels and restaurants, the tourists' food preferences and the lack of a holistic government tourism and agriculture policy.

As established in chapter 6.2.2, agriculture in Zanzibar faces several challenges which influence the productivity and profitability of farming. Concerning the missing link between farming and tourism, small plots, low productivity, seasonality, irregular and inadequate supply, limited high and consistent quality and unsuitability of growing many of the crops in demand are the major constraints hindering a stronger association. According to Telfer and Wall (1996:286), “[a] lack of communication and understanding often exists between the tourism industry and local food-producing sectors in developing countries”. Certainly, according to Kenneth R. Wood, in Zanzibar, “local communities do not understand why hotels will not buy their produce. Hotels do not understand why local people cannot grow what they want” (Guardian 2011). However, traditional (‘organic by default’) farmers in Zanzibar grow a variety of crops, since most practice a polyculture type of farming. Organic farmers

are no different, and certified organic farmers, as established in chapter 6.2.3, usually also grow a variety of food crops, in addition to the cash crop they supply to organic farming businesses. The organic farmers and organic groups/cooperatives interviewed for this research cultivated: aubergine, okra, bell peppers, tomato, zucchini, radish, cucumber, Chinese cabbage, lettuce, coriander, spinach, onion, carrot, potato, sweet potato, cassava, beans, plantain, banana, papaya, lime, lemon, orange, mango, guava, watermelon, coconut, lycheé, spices and medicinal plants: a testament to the variety of tropical and temperate crops that are grown in Zanzibar. However, some of these temperate crops, such as carrot, potato, various salads and herbs are difficult to grow or grow well in Zanzibar, due to both climate and pests. According to Mwatima Juma at IFAD, “in Zanzibar, you can more or less forget about growing potato, carrots are marginal and cabbage is a big fight”. At the same time, it is these temperate crops which are mostly in demand from the tourist industry. Farmers also mention that these crops are very seasonal in Zanzibar, some can only be grown in the two relatively cool months of July and August after the rainy season. Crops that are plentiful in Zanzibar, such as cassava, sweet potato, plantain and some types of African spinach, and which are an important part of Zanzibari cuisine, are hardly used by the tourist industry. This is not surprisingly, recalling the research findings from the Caribbean presented in chapter 2.2.2, which showed how set in their ways tourists can be. Tourists in the Caribbean wanted to try traditional local food, but not be continuously fed on them, preferring the food they eat at home (Bélisle 1983). The majority of American visitors in the Caribbean can be compared to the Italians in Zanzibar, who represent the largest nationality amongst tourists there. Indeed, it is probably not a coincidence that in Zanzibar, pizza and pasta is served at almost every tourist hotel and restaurant. According to Bélisle (1983) ‘indigenizing’ menus in order to increase linkages with domestic agriculture is not a good solution if the dishes do not sell well. Instead, local food supply should adapt to satisfy tourist demand. However, in Zanzibar, much of the foodstuffs in demand are processed or temperate crops not well suited to be grown in the climate and conditions of the islands, and therefore needs to be imported. Also, a further constraint occurs when “[d]ifferent locations have varying seasons and different crops are ready for harvest at different times of the year. If the cycles of peak tourism season and harvest time are not synchronous, then this will have implications for the potential inputs local agriculture can have to the tourism industry” (Telfer & Wall 1996:294). Certainly, in Zanzibar, when the tourist season reaches its peak

around Christmas, the hottest time of the year, temperate vegetables cannot be grown locally. Furthermore, frequent periods of shortage or oversupply result in wide price fluctuations. These aspects undeniably negatively affect the possibility of an extended and entrenched association between agriculture and the tourist industry.

Even though there are numerous constraints hindering a connection with the tourist industry, out of the ten farmers and three organic farming groups/cooperatives interviewed for this research, most said that the market, and specifically the tourist market, influence what they grow. All these farmers were situated relatively close to Stone Town, in a fertile area, and they all cultivate vegetables. The exceptions were firstly, the Eco & Culture NGO teacher and farmer Suleiman Hassan Suleiman, who cultivates lime and coconut in Jambiani, a village in the South-East of Zanzibar. He stated that the hotels and restaurants are not influencing what he grows because there is a weak link between farming and the tourist industry in Jambiani. Secondly, Fom Galu, agronomist, tutor at KATI and farmer, said that his main focus was to provide household food security, but before he had focused more on the tourist market, even using his farm for guided spice tours, selling some produce to the visitors. Thirdly, the two certified farmers grew crops that fit with their main cash crop, and sold whatever surplus they had at the local market. Lastly, the two organic farming groups/cooperatives interviewed in Pemba, GAFA and JUMWAM, grew the crops that the local market demands, as the tourist industry on this island is very limited. According to Abdulla Mohamed Mmanga at OFA, the supply of organic produce is stable, and there has been no increase in organic production which correlates with the growing tourist industry. However, Mmanga believes, as presented earlier, that farmers in Zanzibar are totally organic, not just 'organic by default'. Haji Saleh at OFA on the other hand, said that there had been an increase in organic production, and the tourist market was one of the reasons for this. Salum Rehan, vice general secretary at ZAFFIDE, also stated that there had been an increase, and that demand is higher than supply. Most other interviewees asked about this development were unable to answer as they were not certain of the effect the tourist market has had on the development of organic farming. As established above, certified organic farmers in Zanzibar are connected to organic farming businesses, and there are no farmers that have been certified with the purpose being to supply to the tourist industry.

The way the market for agricultural produce functions in Zanzibar provides a serious constraint for the further association and sharing of benefits between farmers and tourist operators. Because of small plots and polyculture farming, farmers generally harvest small quantities of each crop. Farmers rarely sell their own produce at the market, because of the time, access and costs involved as well as the small quantity of their harvest. The smallholder farmers have found the tourist market very difficult to access because they are at the end of a complicated supply chain (Guardian 2011). Farmers depend on middlemen who purchase their produce, before it gets auctioned off to agents who either work directly for a hotel or have a contract to supply them. Indeed, Zanzibar Market, the catering business mentioned in chapter 1.1, collapsed because all the hotels have their own buyers that supply them. Rafael Mhule Jeremies, a farmer, pointed out that if he could sell directly to hotels, he could earn more. As an example, he said that Chinese cabbage is bought by middlemen for 400-500 TZS per kilo, but the hotels buy it from the bulk middlemen for 1200 TZS per kilo. Certainly, all these stages between the producers and the consumers increase the cost for the consumers and decrease the income for the producers. The middlemen are left with a substantial profit margin.

Because of the demanding market process, UWAMWIMA has established a centre close to the market in Darajani where they can store organic produce obtained from the farmers they train and support. This initiative is a project under Zanzibar Enterprise and Sustainable Tourism (ZEST) started by UWAMWIMA and VSO. The centre ensures a fairer price for farmers, since UWAMWIMA collects a significant amount of produce, they have a strong bargaining voice in setting the price. Also, they can acquire a premium price for the produce since UWAMWIMA can act as guarantor for it being organic and that it has not been mixed up with industrial farming produce from the mainland, which is the situation at the market. The ZEST project has a potential to alleviate the difficult market process for the farmers, and increase their income, as a non profit organisation coordinates and facilitates purchase and sale of organic produce. Hashim Mohammed, an UWAMWIMA farmer quoted by the Guardian (2011), expressed faith in the project: “we get low prices in the normal market, but now we will benefit by going for the high end market of the hotels. I think we will get double the price”. The ZEST project has also attracted the attention of the tourist industry. Daniel Sambai, the general manager at Zanzibar Serena Inn, was quoted by the Guardian (2011)



saying: “the reason we think this is a good project, is that firstly it is creating employment for local farmers, and secondly we are getting fresh organic vegetables. We want to show that the ripple effect of tourism is helping farmers. Our guests are happy because it is fresh produce. We are proud that it is from Zanzibar”.

If non certified organic farmers such as the UWAMWIMA famers are complying with the East African Standard, TOAM can provide them with organic labels. Presently, however, there is no copyright over the use of the word organic, as the RGOZ does not control the use of organic labelling. Unlike in the Global North, where one cannot call a product organic without certification, in Zanzibar, anyone who please can label their products organic. According to Khamis Issa Mohammed at TAZOP, there is a need for a regulatory body for control. He believes the few tourist industry producers who label their produce organic (DADA, Princesses d’Unguja, Zanzibar Organic Spices) are wrong to do so when they are not certified. Certainly, it creates confusion and a false impression for tourists from the Global North who are accustomed to the association of organic labelling with organic certification. However difficult it may be for the government to control the authenticity of the use of organic, according to Mohammed, “if the tourists think they are eating organic food but then find out they are not really, it will hurt the reputation of Zanzibar”. Certainly, some tourist operators seem to opportunistically take advantage over the fact that there is no control over the right to label products organic, and feel free to say that they use organic products because agriculture in Zanzibar is ‘organic by default’. Certainly, as presented above, many of the hotels and restaurants that advertised that they use organic produce were actually not. Nungwi Village Beach Resort (Doubletree by Hilton) was by far the worst example of greenwashing, but also on Kasha Boutique hotel’s web-page “organic slipped in” according to manager Peter Burri, written well before the hotel opened and could foresee the difficulties that lied ahead in living up to the intent of using organic and local food. Burri elaborated:

*“We wanted to buy more from local producers here – it is still a dream, but they cannot supply you. The locals mostly bring fruits and tomato, but they cannot deliver the quantity you need. Even for a small hotel it is too little. Also, the farmers have no price policy – they charge three times higher than at the market, they take a price out of the blue, so we go to town. All that we can buy from the village we do, like fish and water. But in the shops in*

*Matwemwe, they don't put aside for the hotel, even if you have placed an order. In the end you give up".*

Problems aside of the few that do try to integrate locals and local produce in tourist establishments, generally, there is a limited authenticity and dedication to the sustainable development of the local communities and the environment of Zanzibar. According to Gössling (2003b:27-28), in Zanzibar, "the management in most resort hotels changes at least once a year. Under such circumstances, it is unlikely that managers are concerned with sustainability, which can only be achieved through a long term interest in a place and a profound – usually evolving – understanding of the processes impacting the environment". This lack of devotion to the local people and environment of Zanzibar can possibly be related to the fact that the tourism industry is mainly foreign owned and run. In addition, as established, very few Zanzibaris are employed by the industry, even in low key positions. Unlike in the Caribbean where most hotels and restaurants have local chefs and food and beverage managers (Bélisle 1983), in Zanzibar, expatriates fill many of these positions. This could also be a factor explaining the limited use of the Zanzibari cuisine, which affects the opportunity farmers have to supply to the tourist industry.

Taking into consideration all the challenges and constraints within agriculture and the link to the tourist industry in Zanzibar, there is still a window of opportunity to create a strong interconnection between the two. The ZEST project is just one way of uniting farmers and providing them with an opportunity to sell more directly to the tourist industry, thereby increasing their profits. Khamis Issa Mohammed at TAZOP suggested that ZAFFIDE, UWAMWIMA or OFA farmers could get a group certification or that they could use PGS certification which would reduce the costs. Leonard Mtama at TanCert also believes there is a possibility of developing a PGS type certification for the organic farmers, but instead being verification by an inspection officer from an organic certification agency, hoteliers could verify in the field. The important bond of familiarity and trust necessary for this to work could be established through the NGOs/CBOs that train the farmers. If it is accurate, what Mtama at TanCert said, that he felt it is coming up that the tourist industry is looking for organic certification, PGS would certainly be the most appropriate due to the high cost involved for a single farmer to be certified. However, hotels can also link up with the certified

TAZOP farmers, who could sell their additional crops to hotels. Today, these crops are sold at the market, mixed up with both other organic, traditional and also industrial farming products. According to TAZOP, the TAZOP farmers, OFA and TOAM, TAZOP would not mind if farmers used the company to verify that the crops are in fact certified. Several other ways of assuring the quality, quantity and organic standard of local supply certainly exist. Considering all the numerous, various and dedicated actors involved in organic farming in Zanzibar, the foundation for building a partnership that could involve a large section of Zanzibari farmers, and create a stronger bond with the tourist industry, seems highly possible.



# 7 Conclusions and Recommendations

## 7.1 Conclusions

The objectives of this thesis have been to describe the scope of organic agriculture (for tourism) in Zanzibar, as well as its operation, the incentives behind it and its implications. Going back to the research questions in chapter 1.4, some conclusions can be made on the basis of the findings presented in chapter 6.

### **How many farmers practice organic farming and which crops do they grow?**

In Zanzibar, most farmers practice a traditional form of agriculture which to a certain extent resembles organic practices. This has led the farming to be classified as 'organic by default'. However, many of these 'organic by default' farmers do not practice important organic principles which improve and conserve the fertility of the soil, because of a lack of knowledge, small plots and/or availability of inputs. Farmers in Zanzibar grow a variety of crops, including fruits, vegetables and spices, since most practice a polyculture type of farming. Trained organic farmers often grow temperate vegetables.

### **How many organic farmers are certified and which crops do they grow?**

In Zanzibar, the number of certified organic farmers is very low. Only farmers growing cloves for ZSTC and spice and citrus from TAZOP are certified. Certified organic farmers usually also grow a variety of food crops similar to any other Zanzibari farmer, in addition to the cash crop they supply to organic farming businesses.

### **How and through whom do farmers attain organic certification?**

In Zanzibar, the Swiss certifier IMO and the Tanzanian certifier TanCert provide organic certification. The certified organic farmers in Zanzibar are contracted farmers, and so it is the organic farming business which owns the certificate and pays for all certification costs. This

type of arrangement is standard in Zanzibar, as the typical *shamba* (farm) on the islands is small. It would not be feasible for the vast majority of farmers to attain their own certification due to the high costs involved.

### **What does the farmer understand to be organic produce/farming?**

In Zanzibar, organic farmers define organic agriculture as a type of farming which does not use *dawa* (synthetic agrochemicals), but (instead) makes use of *mbolea* ((local) compost). The quite limited understanding Zanzibari organic farmers have of what organic agriculture entails, is coherent with the general foundation organic agriculture has in Zanzibar; namely being based on traditional farming methods.

### **Who are involved in the use/sale/production/promotion of local organic products?**

In Zanzibar, several NGOs/CBOs (OFA, ZAFFIDE, Eco & Culture NGO, TOAM, IFAD, MWIVATA, UWAMWIMA, CARE, VSO, ACRA, Action Aid) and some governmental agencies (MALE, ASSP/ASDP-L, PPD, KATI) directly or indirectly promote organic agriculture, and train farmers and farmer groups in FFS. These farmers follow to large extent organic principles, but are not certified. Their produce mainly ends up in the local markets, where hotels and restaurants source a part of their foodstuffs from. However, the local organic products at the market gets mixed up with industrial products from the Tanzanian mainland. Some hotels advertise that they use local organic products; however, this thesis has shown that this is only partly the case. A handful of tourist operators (Princesses d'Unguja, Dada, Ras Nungwi Beach Hotel, CHICOP, Zanzibar Organic Spices) have established links to organic farmers, who supply them with products they label organic and sell to tourists. The organic farming business TAZOP is certified by IMO, and Kizimbani Government Spice Farm is in the process of attaining certification from TanCert.

### **To what extent are the different stakeholders in organic agriculture and tourism linked?**

In Zanzibar, many organic agriculture and organic tourism stakeholders were only acquainted with a few other stakeholders and some knew little or nothing about most other actors. Many different stakeholders tend to mainly connect within their actor group. The organic tourism sector lacks linkages with almost all other actor groups. The main connection between organic farmers and the tourist industry is indirect through third-parties at the

market.

### **How does the market between farmers and tourist operators function?**

In Zanzibar, farmers rarely sell their own produce as the market, because of the time, access and costs involved as well as the small quantity of their harvest. They therefore depend on middlemen who purchase their produce, before it gets auctioned off to agents who either work directly for a hotel or have a contract to supply them. The farmers are in a very weak negotiating position, and are paid little by the middlemen, who themselves are left with a substantial profit margin.

### **What is the rationale behind the stakeholder's sale/use/production/promotion of organic products?**

In Zanzibar, the major incentive farmers have for growing organically is the health benefits. Organic farming groups/cooperatives are also motivated by health benefits, and furthermore, the high cost of synthetic agrochemicals provides an incentive for organic production. The organic farming business Kizimbani Government Spice Farm also stresses the importance of organic farming for health and for farmers to receive a better price for their produce while TAZOP opted for organic due to market demand but also because of environmental consciousness. NGOs/CBOs promote organic because of several incentives, partly of socio-economic character, but again, it is mainly the health benefits that provide the dominant rationale. Governmental agencies only indirectly promote organic farming, but generally conceive organic agriculture as conducive because of farmers' insufficient capital. Some organic tourist operators are motivated to deal with organic products by their personal conviction. Several operators consider organic products to be a part of the whole eco-tourism package or their programme to support locals, while others were also motivated by the value organic can have in marketing.

### **To what extent is organic farming directed towards the tourist industry, does it influence what is produced and has there been an increase in organic production and certification which correlates with the growing tourist industry?**

In Zanzibar, the link between the tourist industry and the agricultural sector is inferior. Up to eighty percent of the food consumed in the hotels and restaurants originates from elsewhere. Organic farmers and organic farming groups/cooperatives are influenced to grow what they

do by the market, and specifically the tourist market. As many farmers recently have been trained in organic practices, there has been a raise in organic production. The tourist market is one of the reasons for this, as it has created a higher demand for foodstuffs. However, the tourist industry at large does not specifically induce organic production. As it is temperate vegetables which are mostly in demand from the tourist industry, some farmers are resorting to the use of synthetic agrochemicals due to the climatic conditions and pests found in Zanzibar. Moreover, tourist food preferences towards homely cuisine and processed foods create little room for local organic farmers to supply to the industry. No farmers have been certified with the purpose being to supply to the tourist industry, the certified organic farmers in Zanzibar supply to organic farming businesses which export the produce.

### **What are the difficulties and benefits of organic farming?**

In Zanzibar, there are many difficulties with farming in general. These include: low productivity, seasonality, small plots, reliance on middlemen who push farmers profit down, market constraints, price fluctuations, lack of capital to buy (expensive) inputs, equipment and hire labour, maintaining quality in post-harvesting storage, limited water supply, tough coral rag land, pests and diseases, wild and domestic animals eating farmers' produce, climatic conditions, shortage of agricultural land, limited value adding processing, low status of farming, farmers cultivate for subsistence/farmers do not consider agriculture as a business/agriculture is not commercialised, irregular and inadequate supply, limited high and consistent quality and unsuitability of growing many of the crops in demand. Most farmers and farmer groups/cooperatives experienced an increase in both quality and quantity when changing to organic production, and therefore improved the productivity and profitability of farming as well as food security.

### **Does organic farming improve the socio-economic and environmental conditions for farmers?**

In Zanzibar, organic farming provides farmers with an opportunity to receive training, acquire new knowledge, improve farming techniques, advance productivity of their crops and create important ties with other farmers in farmer groups. It also enables farmers to avoid the use of expensive and possibly harmful synthetic agrochemicals. Therefore, organic farming contributes to socio-economically and environmentally sustainable development for farmers.



## 7.2 Recommendations

According to Bélisle (1983:269), “the paucity of research into the relationships between tourism and food production makes it difficult to draw conclusions that could support new policy initiatives”. To be able to draw any conclusions, Bélisle (1983) considered further research to be necessary, concerning:

- the nature and extent of food imports and associated foreign-exchange leakages;
- the competition between agriculture and tourism for land, labour, impact on land values, land use and food prices;
- why a large proportion of the food for the tourist industry is imported;
- whether the consumption of local or imported food varies with structural characteristics of tourism such as hotel quality, size, ownership, or location.

Nearly twenty years after Bélisle called out for more research on the matter, it is still scarcely studied. The general consensus concerning tourism portrays the industry as accommodating to the development of Global South countries. Since the agricultural sector employs a large section of the populations in the Global South, a connection between tourism and agriculture seems to be the most imperative and straight forward link for poor people to be able to benefit from this huge international industry. However, there is no denying that creating this connection is difficult, as generally, the results of agricultural linkage programmes have been disappointing (Mitchell and Ashley 2010). According to Telfer and Wall (1996:299-300) “the forces which must be overcome to promote the use of local inputs are formidable. Not least of the challenges is the establishment of institutional commitments which transcend the interest and involvement of specific individuals”.

For any agricultural linkage initiative to be successful, it “often need to work on the supply side (to increase quantity, quality and consistency of suppliers), the demand side (to ensure a market for the produce), with intermediaries (to provide working capital to reconcile the disjuncture between hotel payment terms and cash-flow requirements of farmers) and the

enabling environment for linkages” (Mitchell and Ashley 2010:75). Latimer (1985) has suggested some ways in which food agricultural inputs into a tropical island tourist industry can be improved. Firstly, the farmers need help to grow the temperate crops in demand. Secondly, the hotels need help with contracts, insurance for non-delivery, and back-up supply arrangements if the suppliers cannot deliver. Thirdly, cold storage should not only be at the hotels, but also for the producers, cooperative or wholesaler who then can recoup their costs by buying during surplus and selling during scarcity. Lastly, local cuisine should be promoted by the tourist office, and a levy of differential duties can influence hotel buyers into sourcing foodstuffs domestically. Additionally, Telfer & Wall (1996:300) believe that “[i]ncreased communication between hotel operators and suppliers is needed so that expectations on both sides are understood and high quality products are delivered on time”. Moreover, “[i]f the local food producers are to participate fully in tourism, ways must be found to institutionalize working relationships” (Telfer & Wall 1996:286).

To be able to firmly conclude whether organic farming *for tourism* in Zanzibar is a socio-economically and environmentally sustainable scheme for poor farmers, further research is necessary. Large scale study of the general tourist industry and of tourists should be conducted to help to detect the level of interest in local organic products. From Bélisle’s list presented above, it is the last issue out of the four which is poorly understood and therefore highly interesting to investigate further in Zanzibar. Related to this, it is of interest to find out if there is a link between foreign owned and operated hotels and overseas food suppliers. Even if the organic farming sector in Zanzibar has many motivations behind producing or promoting organic agriculture other than simply to take advantage of the tourist market, it is paramount for the organic sector’s further development to have a trustworthy market for its produce. The development of safe food production is vital also for the food security of locals, as “it may be easy for hotels to overcome the scarcity of resources by purchasing at higher prices or turning to imports. Obviously, these are not alternative solutions for the local population” (Gössling 2003a:199).

Certainly, there are many features and institutions already in place, which provide Zanzibar with an opportunity to expand and improve organic farming on the islands. These consists of: the traditional (‘organic by default’) basis of agriculture, a scepticism amongst farmers

towards using synthetic agrochemicals, inventive new or improved technology utilizing natural raw materials which are abundant on the islands, for example spices and seaweed, the existence of PPD, which teaches farmers how to produce important organic agricultural inputs, the establishment of ZAREC, producing certified organic fertilisers from local food waste, the governmental programmes ASSP/ASDP-L, which amongst others emphasise on increasing livestock production, important for organic farmers as animals provide them with manure, and numerous NGOs/CBOs which train farmers in organic practices. Zanzibar should take advantage of this comparative advantage and presence of already established institutions, as many of the constraints in both developing organic agriculture and linking local farmers with the tourist industry can be overcome with knowledge, cooperation, training, adjustments in policies and facilitation.

The organic farming sector and the organic tourism sector certainly have a lot to gain with increased collaboration. The tourist industry can save money by purchasing their products locally, marketing their food as organic and short-travelled and themselves as socially responsible and/or 'green'. The farmers can increase their income by having a secure market and by cutting out several stages of middlemen who push the farmers' revenue down. But for this to happen, farmers need to come together in groups, to be able to provide the needed stable high supply with the same quality standard. The ZEST project should attempt to procure group or PGS certification, as they have the resources and are at the forefront in linking farmers with the tourist industry. The lessons learnt from this can provide valuable insight for later certification schemes. TOAM should initiate a workshop for all the stakeholders within organic agriculture in Zanzibar, since there is a need to get to know each other, exchange knowledge and experiences and create a united front. The government needs to expand the use of FFS, provide credit for inputs, equipment and storage facilities, specifically support organic initiatives, include organic inputs for sale in duka la dawas, make certified organic manure from ZAREC available for local farmers, control the use of organic labelling, cater for organic certification, link the agriculture and tourism policies and develop principles the tourist industry must follow to ensure their fruitful connection.

Tourism has become the single most important sector in Zanzibar, providing the poor archipelago with much needed revenue. However, all parties involved in its development in

Zanzibar should keep in mind that “[i]t is insufficient to set goals simply in terms of numbers of visitors or their gross expenditures for, unless employment opportunities and expenditures reach local residents, they may lose more than they gain from tourism development” (Telfer & Wall 1996:300). Certainly, tourism can contribute to sustainable development for Zanzibar, but “[t]he satisfaction of tourism requirements must not be prejudicial to the social and economic interests of the population in the tourist areas, to the environment, or above all to natural resources which are fundamental attractions of tourism” (UNWTO 1982 in Honey 1999:19). Since food is an essential input in the tourist industry, according to Telfer & Wall (1996:293), “[t]he relationship between tourism and agriculture can also be incorporated under the concept of sustainable tourism development [...] If the hotels are using local products produced in the community, this may imply a more sustainable path for development”. A strong connection with agriculture would also help to keep more of the tourist expenditures in the host economy, to benefit the people of Zanzibar.

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## Appendices

### Appendix 1: Interviews Summary

<b>Date</b>	<b>Time</b>	<b>Association</b>	<b>Interviewee(s)</b>	<b>Position</b>
29.10.2009	12.00 pm	OFA	Abdulla Mohamed Mmanga	Executive secretary
30.10.2009	03.30 pm	MALE	Dr. Islam S. Salum	Director of policy and planning
03.11.2009	12.30 pm	ZAFFIDE	Salum Rehan	Vice general secretary
08.11.2009	05.00 pm	Tusife Moyo	Hawa Simai, Fatuma Machano	Group members
11.11.2009	12.10 pm	KATI	Mohamed Rashid	Head master
11.11.2009	02.50 pm	Eco & Culture Tours	Haji Hafidh Haman	Managing director
11.11.2009	03.20 pm	Eco & Culture NGO	Haji Hafidh Haman	Managing director
13.11.2009	11.00 am	Kizimbani Government Spice Farm	Salum Rehan, Ezekiel Jeremia Maygenze	Administrative farm research station manager, plantation farmer
18.11.2009	11.30 am	Nungwi Village Beach Resort (Doubletree by Hilton)	Imtyaz Mirza	General manager
20.11.2009	03.30 pm	MALE	Juma Ali Juma	Agricultural development officer
23.11.2009	12.00 pm	TAZOP	Khamis Issa Mohammed	Managing director
01.12.2009	04.00 pm	Princesses D'Unguja	Patricia Lissague	General manager
03.12.2009	09.30 am	ZANOP	Nassor Hamad Omar	General director
08.12.2009	11.45 am	ENVIROCARE	Grace Murungi	Project officer
08.12.2009	02.10 pm	TOAM	Jordan Gama	Executive secretary
10.12.2009	09.30 am	IFAD	Mwatima Juma	Tanzanian representative
10.12.2009	11.30 am	TanCert	Leonard Mtama, Christian Shoo	Manager, inspection officer

03.02.2010	12.00 pm	MVIWATA	Khamis Ame Mbwana, Awesu Shabani	Technical agricultural advisor, member
05.02.2010	10.00 am	ASSP/ASDP-L (MALE)	Khalfan M. Saleh, Zainub Saleh	Assistant programme coordinator, planning officer
05.02.2010	11.45 am	PPD (MALE)	Ahmed Haji	Research officer
06.02.2010	11.00 am	Dada	Fatma Khamis	Group leader
06.02.2010	12.30 pm	Dada	Antje Förstle	Founder
08.02.2010	11.55 am	UWAMWIMA	Almas Sudi	Farmer
08.02.2010	12.40 pm	UWAMWIMA	Haji Omar Bhai	Farmer
08.02.2010	01.30 pm	UWAMWIMA	Salama Mwinyihaji	Farmer
08.02.2010	03.00 pm	UWAMWIMA	Omar Abdallah Ali	Secretary
09.02.2010	09.30 am	CARE	Ismail S. Mgeni, Anton Kanyumu, Hakum Sanani	Monitoring and evaluation officer, volunteer, project officer
09.02.2010	10.55 am	ZCT	Miraji Ukuti Usi	Previous planning officer
10.02.2010	09.05 am	UWAMWIMA	Rafael Mhule Jeremies	Farmer
10.02.2010	10.00 am	UWAMWIMA	Bishara Zamu Ali	Farmer
10.02.2010	10.30 am	UWAMWIMA	Salma Muksini	Farmer
11.02.2010	09.15 am	Commission for Research and Extension (MALE)	Aziza Seif	Extension officer
15.02.2010	01.30 pm	Ministry of Tourism	Affan O. Maalim	Principle Secretary of the Minister of Tourism
15.02.2010	02.25 pm	OFA	Haji Saleh	Interim chair person
15.02.2010	03.15 pm	MALE	Haji Saleh	Research officer
16.02.2010	12.25 pm	Karamba Resort	Gemma Crespi	Manager
17.02.2010	10.00 am	Eco & Culture Tours	Ramadan Issa Abass	Tour guide
17.02.2010	02.15 pm	Eco & Culture NGO	Suleiman Hassan Suleiman	Farmer
18.02.2010	10.00 am	JUWAMKU	Shaban Mabundu Clement (and more)	Leader, farmers
18.02.2010	02.15 pm	VSO, UWAMWIMA	Maurice Kwame, Hesbon Kimotho	Advisors and volunteers
19.02.2010	09.05 am	ACRA	Alessia Lombardo	Project manager
20.02.2010	04.00 pm	CHICOP	Godfrey Mloka	Lodge manager

22.01.2010	12.50 pm	Kasha Boutique Hotel	Peter Burri	Manager
22.02.2010	03.00 pm	Ras Nungwi Beach Hotel	Angelika Hoose	General manager
24.02.2010	11.20 am	TAZOP	Mohamed Saleh Ali	Farmer
24.02.2010	12.40 pm	Duka la pembejeo	Mzee Joka Haji	Shop manager
24.02.2010	01.35 pm	TAZOP	Said Ali Juma	Farmer
25.02.2010	11.55 am	Zanzibar Organic Spices	Hassan Harouna	Founder
25.02.2010	04.30 pm	OFA	Foum Galu	Farmer
25.02.2010	06.10 pm	VSO	Kenneth R. Wood	Volunteer
28.02.2010	10.30 am	GAFA	Suleiman Hamad Suleiman, Hamad Mwitumbe Mbarouk	Secretary and internal inspector, chairperson
02.03.2010	10.30 am	JUMWAM	Hamad Ali Mussa, Faki Sharif Juma, Hassan Shamis Hassan, Omar Ali Omar (and more)	Chair person, secretary, vice secretary, veterinarian



## Appendix 2: Interview Guide for Organic Farmers

Date

Interview number

1. Name of interviewee
2. Sex
3. Age
4. Village
5. Place of birth
6. Education level
7. Sources of livelihood (on + off farm)
8. Position in household
9. Number of people in household
10. What does the farmer understand as organic produce/farming?
11. Type of produce grown, organic and non-organic
12. Tillage method
13. Animals
14. Perception of soil fertility
15. Size
16. Proximity to main road
17. Which market used for selling and its proximity
18. Years of cultivation on this land
19. Number of people working on farm
20. Gender relations: who does what?
21. Why organic farming:
  - lack of/costly synthetic inputs
  - market demand
  - environment/health benefits
  - tradition
  - policies
  - training
22. How long has the farmer grown organically?
23. How has the farm evolved over time (since becoming organic):
  - variety
  - area under cultivation
  - quality
  - quantity
  - environmental change
24. Benefits of organic farming
25. Difficulties of organic farming
26. Has the farmer heard of organic certification?

27. Is the farm certified and by which agency? (if not, move to question 33)
28. Why did the farmer decide to become certified?
29. How did the certification process take place?
30. View on certification process:
  - knowledge required
  - finances required
31. How has the certification changed the farm:
  - type of produce
  - quantity
  - quality
  - profitability
32. How has the certification changed the livelihood of the farmer?
33. Why is the farmer not certified:
  - does not know about it
  - not interested
  - lack finances
  - standards too difficult to fulfil
  - lack access to certification agency
34. Sale of organic produce to whom:
  - middlemen
  - hotels/shops
  - company
  - organisation
  - local market
35. Importance of sale of organic produce for the livelihood of the farmer
36. Importance of organic farming for the livelihood of the farmer
37. Which institutions influence the type of organic produce grown:
  - tourist industry
  - local market
  - government
  - international market
  - organisations
  - organic farming businesses
  - certification agencies
  - organic farmer groups/coop.
38. View of/role of these institutions in securing sale of organic produce
39. Reason for tourist operators selling/using/promoting organic produce:
  - environmental consideration
  - client demand
  - health
  - government policy
  - trendy
  - social (supporting poor local small scale farmers)
  - only produce they can get hold of
  - coincidental/no particular reason behind

40. View of economic profitability, demand, stability and security in practising organic farming:

- short term
- long term
- compared to Zanzibaris working in the tourist industry
- compared to industrial farming

41. Community development in areas of organic farming:

- improved welfare?
- inequality amongst farmers?

42. Do you know the name and address of any persons or institutions that are involved with organic farming or marketing of organic produce in Zanzibar?

## Appendix 3: Interview Guide for NGOs/CBOs

Date

Interview number

1. Name of interviewee
2. Name of non-governmental organisation/community based organisation
3. Position in organisation
4. Number of members
5. Number of organic farmers in Zanzibar benefiting directly from the organisation's activities
6. When was the organisation established and by whom?
7. Place of activity in Zanzibar
8. Funding, partnerships, cooperation with other institutions promoting organic agriculture
9. What are the reasons/arguments behind this organisation's promotion of organic farming?
10. Which programmes or projects does this organisation have directed towards organic farming:
  - scale
  - scope
  - time
11. Does the organisation promote certification for organic farmers?
12. Progress/success made in which areas dealing with organic farming in Zanzibar?
13. Failure/challenges in which areas dealing with organic farming in Zanzibar?
14. How many farmers practice organic farming by default in Zanzibar?
15. How many organic farmers are certified in Zanzibar?
16. Why do farmers in Zanzibar grow organic food:
  - lack of inputs
  - market demand
  - environmental consciousness
  - tradition
  - policies
17. Do organic farmers experience environmental change from this type of agriculture:
  - quality
  - quantity
18. What are the benefits of organic farming in Zanzibar?
19. What are the difficulties of organic farming in Zanzibar?

20. To what degree do organic farmers in Zanzibar have a strong knowledge of the benefits and difficulties of organic farming?
21. To what extent is organic farming in Zanzibar directed towards the tourist industry:
  - by default farmers
  - certified farmers
22. Has there been an increase in organic food produced which correlates to the growing tourist industry?
23. View of economic profitability, demand, stability and security in practising organic farming:
  - short term
  - long term
  - compared to industrial farming
  - compared to Zanzibaris working in the tourist industry
24. How are organic farmers' livelihoods compared to the Zanzibaris working in the tourist industry:
  - stability
  - security
  - profitability
25. Reason for tourist operators selling/using/promoting organic produce:
  - environmental considerations
  - health
  - trendy
  - social (supporting poor local small scale farmers)
  - only produce they can get hold of
  - coincidental/no particular reason behind
  - client demand
  - government policy
26. View on local versus international market for organic produce from Zanzibar:
  - promotion
  - type of produce
  - quality standards
  - profitability
27. How does certification change the socio-economic conditions for organic farmers?
28. Community development in areas of certified organic farmers:
  - improved welfare?
  - inequality amongst farmers?
29. How important is organic farming for the livelihoods of the farmers?
30. Do you know the name and address of any persons or institutions that are involved with organic farming or marketing of organic produce in Zanzibar?

## Appendix 4: Interview Guide for Government Agencies

Date

Interview number

1. Name of interviewee
2. Name of government agency
3. Position in organisation
4. Funding, partnerships, cooperation with other institutions promoting organic agriculture
5. Does this agency have a policy of promoting organic farming?
6. What are the reasons/arguments behind promoting organic farming?
7. Which programmes or projects does this agency have directed towards organic farming:
  - scale
  - scope
  - time
8. Does this agency promote certification of organic farmers and why/why not?
9. Progress/success made in which areas dealing with organic farming in Zanzibar?
10. Failure/challenges in which areas dealing with organic farming in Zanzibar?
11. Number of organic farmers by default in Zanzibar
12. Number of certified organic farmers in Zanzibar
13. Why do farmers in Zanzibar grow organic food:
  - lack of inputs
  - market demand
  - environmental consciousness
  - tradition
  - policies
14. Do organic farmers experience environmental change from this type of agriculture:
  - quality
  - quantity
15. To what degree do organic farmers in Zanzibar have a strong knowledge of the benefits and difficulties of organic farming?
16. How does certification change the socio-economic conditions for organic farmers?
17. Community development in areas of certified organic farmers:
  - improved welfare?
  - inequality amongst farmers?
18. To what extent is organic farming in Zanzibar directed towards the tourist industry?
19. Has there been an increase in organic food produced which correlates to the growing

tourist industry?

20. View of economic profitability, demand, stability and security in practising organic farming:

- short term
- long term
- compared to Zanzibaris working in the tourist industry
- compared to industrial farming

21. Reason for tourist operators selling/using/promoting organic produce:

- environmental considerations
- health
- trendy
- only produce they can get hold of
- social (supporting poor local small scale farmers)
- coincidental/no particular reason behind
- client demand
- government policy

22. View on local versus international market for organic produce from Zanzibar:

- promotion
- type of produce
- quality standards
- profitability

23. How are organic farmers' livelihoods compared to the Zanzibaris working in the tourist industry:

- stability
- security
- profitability

24. How important is organic farming for the livelihoods of the farmers?

25. Do you know the name and address of any persons or institutions that are involved with organic farming or marketing of organic produce in Zanzibar?

## Appendix 5: Interview Guide for Organic Certification Agencies

Date

Interview number

1. Name of interviewee
2. Name of agency
3. Position in organisation
4. Why do farmers in Zanzibar grow organic food:
  - lack of inputs
  - market demand
  - environmental consciousness
  - tradition
  - policies
5. Number of organic farmers by default in Zanzibar
6. Number of certified organic farmers in Zanzibar
7. Process of certification:
  - by whom, when, where
  - time scale
  - knowledge
  - incentives
  - produce
  - quality standards
  - finances
8. Challenges with certification (expenses, expertise):
  - for farmers
  - for certification agencies
9. Benefits of certification (welfare, security):
  - local market
  - international market
10. View on local market versus international market for organic produce from Zanzibar:
  - promotion
  - type of produce
  - quality standards
  - profitability
11. To what extent is organic farming in Zanzibar directed towards the tourist industry?
12. Has there been an increase in organic food produced which correlates with the growing tourist industry?
13. View of economic profitability, demand, stability and security in practising organic farming:
  - short term
  - long term
  - compared to industrial farming



- compared to Zanzibaris working in the tourist industry
14. Reason for tourist operators selling/using/promoting organic produce:
    - environmental considerations
    - health
    - trendy
    - only produce they can get hold of
    - social (supporting poor local small scale farmers)
    - coincidental/no particular reason behind
    - client demand
    - government policy
  15. How does certification change the socio-economic conditions for organic farmers?
  16. Does certification lead to increased differences/inequality amongst farmers?
  17. To what degree do organic farmers in Zanzibar have a strong knowledge of the benefits and difficulties of organic farming?
  18. How important is organic farming for the livelihoods of the farmers?
  19. Do you know the name and address of any persons or institutions that are involved with organic farming or marketing of organic produce in Zanzibar?

## Appendix 6: Interview Guide for Universities/Research Institutions

Date

Interview number

1. Name of interviewee
2. Work title
3. Name of university/research station (and faculty)
4. Funding, partnerships, cooperation with other institutions promoting organic agriculture?
5. Does this institution have programmes or projects directed towards organic farming:
  - scale
  - scope
  - time
6. How many farmers practice organic and organic farming by default in Zanzibar?
7. How many organic farmers are certified in Zanzibar?
8. Why do farmers in Zanzibar grow organic food:
  - lack of inputs
  - market demand
  - environmental consciousness
  - tradition
  - policies
9. Do organic farmers experience environmental change from this type of agriculture?
10. What are the benefits of organic farming in Zanzibar?
11. What are the difficulties of organic farming in Zanzibar?
12. To what degree do organic farmers in Zanzibar have a strong knowledge of the benefits and difficulties of organic farming?
13. To what extent is organic farming in Zanzibar directed towards the tourist industry?
14. Has there been an increase in organic food produced which correlates to the growing tourist industry?
15. View of economic profitability, demand, stability and security in practising organic farming:
  - short term
  - long term
  - compared to Zanzibaris working in the tourist industry
  - compared to industrial farming
16. View on local versus international market for organic produce from Zanzibar
  - promotion
  - type of produce

- quality standards
  - profitability
17. How are organic farmers' livelihoods compared to the Zanzibaris working in the tourist industry:
- stability
  - security
  - profitability
18. Which institutions influence the type of organic produce grown:
- tourist industry
  - international market
  - government
  - organic farming businesses
  - organisations
  - organic farming
  - certification agencies
  - groups/cooperatives
  - local market
19. Reason for tourist operators selling/using/promoting organic produce:
- environmental consideration
  - trendy
  - health
  - client demand
  - only produce they can get hold of
  - social (supporting poor local small scale farmers)
  - coincidental/no particular reason behind
20. Does this agency promote certification of organic farmers and why/why not?
21. How does the certification process take place?
22. Does certification improve the socio-economic conditions for the farmers?
23. Does certification lead to increased differences/inequality amongst farmers?
24. Progress/success made in which areas dealing with organic farming in Zanzibar?
25. Failure/challenges in which areas dealing with organic farming in Zanzibar?
26. How important is organic farming for the livelihoods of the farmers?
27. Can organic farming for tourism in Zanzibar be a sustainable livelihood strategy for Zanzibaris?
28. Research on organic farming at this university:
- reports
  - articles
  - theses
29. Where can these resources be found?
30. Do you know the name and address of any persons or institutions that are involved with organic farming or marketing of organic produce in Zanzibar?

## Appendix 7: Interview Guide for Organic Farming Businesses

Date

Interview number

1. Name of interviewee
2. Name of business
3. Position in company
4. Plantation or contracted farmers?
5. Location
6. How long has the business existed and who established it?
7. Type of produce, organic and non-organic
8. Tillage method
9. Animals
10. Perception of soil fertility
11. Size
12. Proximity to main road
13. Proximity to market
14. Years of cultivation on this land
15. Number of people working on the farm, and are they Zanzibaris?
16. Gender relations: who does what?
17. Why organic farming:
  - lack of inputs
  - market demand
  - environmental consciousness
  - tradition
  - policies
18. How has the organic farm evolved over time:
  - variety
  - area under cultivation
  - quality
  - quantity
19. Which institutions influence the type of organic produce grown:
  - tourist industry
  - government
  - organisations
  - certification agencies
  - local market
  - international market
  - organic farmer groups/cooperatives

20. When certified and by which agency? (if not certified, move to question 25)
21. Why did the business decide to become certified?
22. How did the certification process take place?
23. View on organic certification process:
  - knowledge required
  - finances required
24. How has the certification changed the business:
  - type of produce
  - quantity
  - quality
  - profitability
25. Why is the business not certified:
  - do not know about it
  - not interested
  - lack finances
  - standards too difficult to fulfil
  - lack access to certification agency
26. Sale of organic produce to whom:
  - middlemen
  - company
  - local market
  - local hotels/shops
  - international market
  - organisation
27. View of/role of these institutions in securing sale of organic produce
28. Reason for tourist operators selling/using/promoting organic produce:
  - environmental considerations
  - client demand
  - health
  - government policy
  - trendy
  - only produce they can get hold of
  - social (supporting poor local small scale farmers)
  - coincidental/no particular reason behind
29. Benefits of organic farming
30. Difficulties of organic farming
31. Environmental changes due to organic farming
32. Economic changes due to organic farming
33. View of economic profitability, stability and security in practising organic farming:
  - short term
  - compared to industrial farming
  - long term
34. Socio-cultural changes due to organic farming

35. Community development in areas of organic farming:
- improved welfare
  - inequality amongst farmers
36. How important is practising organic farming for the survival of the business?
37. Do you know the name and address of any persons or institutions that are involved with organic farming or marketing of organic produce in Zanzibar?

## Appendix 8: Interview Guide for Organic Farming Groups/Cooperatives

Date

Interview number

1. Name of interviewee
2. Name of association
3. Position in association
4. When established and by whom?
5. Number of members
6. Area of activity
7. Funding, partnerships, cooperation with other institutions promoting organic agriculture
8. What are the reasons/arguments behind promoting organic farming?
9. Does the association promote organic farming amongst non-members?
10. Does this association promote certification of organic farmers?
11. Which programmes or projects does this association have directed towards organic farming:
  - scale
  - scope
  - time
12. Progress/success made in which areas dealing with organic farming in Zanzibar?
13. Failure/challenges in which areas dealing with organic farming in Zanzibar?
14. Why do farmers in Zanzibar grow organic food:
  - lack of inputs
  - market demand
  - environmental consciousness
  - tradition
  - policies
15. Do organic farmers experience environmental change from this type of agriculture?
16. Benefits of organic farming in Zanzibar
17. Difficulties of organic farming in Zanzibar
18. To what degree do organic farmers in Zanzibar have a strong knowledge of the benefits and difficulties of organic farming?
19. Which institutions influence the type of organic produce grown:
  - tourist industry
  - government

- organisations
  - certification agencies
  - local market
  - international market
  - organic farming businesses
20. Reason for tourist operators selling/using/promoting organic produce:
- environmental considerations
  - health
  - trendy
  - only produce they can get hold of
  - social (supporting poor local small scale farmers)
  - coincidental/no particular reason behind
  - client demand
  - government policy
21. Is this association or (some of) its members certified?
22. How did the certification process take place?
23. View on organic certification process:
- knowledge required
  - finances required
24. How has the certification changed the association/members farms:
- type of produce
  - quality
  - quantity
  - profitability
25. Does this association promote certification for organic farmers and why/why not?
26. How does certification change the socio-economic conditions for organic farmers?
27. Community development in areas of certified organic farmers:
- improved welfare
  - inequality amongst farmers
28. To what extent is organic farming in Zanzibar directed towards the tourist industry?
29. Has there been an increase in organic food produced which correlates to the growing tourist industry?
30. View of economic profitability, demand, stability and security in practising organic farming:
- short term
  - long term
  - compared to Zanzibaris working in the tourist industry
  - compared to industrial farming
31. View on local versus international market for organic produce from Zanzibar:
- promotion
  - type of produce
  - quality standards
  - profitability



32. How are organic farmers' livelihoods compared to the Zanzibaris working in the tourist industry:

- stability

- profitability

33. How important is organic farming for the livelihoods of the farmers?

34. Do you know the name and address of any persons or institutions that are involved with organic farming or marketing of organic produce in Zanzibar?

## **Appendix 9: Interview Guide for Hotels, Restaurants, Catering Services, Producers, Shops and Tourist Operators that Sell, Use and/or Promote Organic Produce**

Date

Interview number

1. Name of interviewee
2. Name of company
3. Type of company
4. Location of company
5. When established and by whom?
6. Position in company
7. Concerning organic produce from Zanzibar, do they sell, use or promote it?
8. Since when has the company sold/used/promoted organic produce from Zanzibar?
9. Type of organic produce sold/used/promoted
10. Where do you sell the products?
11. Quantity sold/used of organic produce (as compared to non-organic)
12. Where do they get this produce from:
  - local market
  - contracted farmers
  - catering services
  - organic farming businesses
  - organic farmers
  - groups/cooperatives
13. Have you heard of organic certification?
14. Is the organic produce that is sold/used/promoted certified?
15. If not, are you interested in certifying the products sold/used/promoted?
16. Reason for selling/using/promoting organic produce:
  - environmental considerations
  - trendy
  - only produce they can get hold of
  - social (supporting poor local small scale farmers)
  - coincidental/no particular reason behind
  - client demand
  - government policy
17. Has the demand for organic produce increased, decreased or been stable over the past ten years, and how do you expect the demand to develop in the future?

18. Will the company stick to selling/using/promoting local organic produce for the foreseeable future?
19. How has the sale/use/promotion of organic produce affected the company:
  - financially
  - competitively
  - socially
20. Has the company increased the price of its products since using/labelling organic?
21. Does the company collaborate with any institutions working with organic farming?
22. Do you know the name and address of any persons or institutions that are involved with organic farming or marketing of organic produce in Zanzibar?