AfricaWorks

Response

Options on Commodity Price Inflation for the Demand and Supply in Microfinance

Evaluating Prospects and Challenges at the example of Mozambique

OTTO-VON-GUERICKE-UNIVERSITÄT MAGDEBURG

Fakultät für Wirtschaftswissenschaften

Response Options on Commodity Price Inflation for the Demand and Supply in Microfinance

Evaluating Prospects and Challenges at the example of Mozambique

(Status: 2008)

Supervisor: Prof. Dr. Birgitta Wolff

Place and date of submission: Magdeburg, 23rd of January 2009

Leonore Grünberg

VWL – Internationale Wirtschaft

c/o Fam. Cuna
Gottschalkstr. 16
13359 Berlin
lgruenberg@gmx.de

Table of Contents

List of Figures

List of abbreviations

ADB	Asian Development Bank
AfDB	African Development Bank
AW	AfricaWorks
BCI	Business Consulting Institute
BIM	Banco Internacional de Moçambique
BOM	Oportunidade de Moçambique
CESCR	United Nations Committee on Economic, Social and Cultural Rights
CFF	Compensatory Financing Facility
CGAP	Consultative Group to Assist the Poor
CLUSA	Rural Group Enterprise Development Program launched by the Cooperative League of the USA
CRESCE	Crédito Sustentável para o Crescimento de Empresários
FAO	Food and Agriculture Organization of the United Nations
FCC	Fundo de Crédito Comunitário
FDC	Fundo de Desenvolvimento Communitário
GNP	Gross National Product
GTZ	Gesellschaft für Technische Zusammenarbeit
IBRD	International Bank for Reconstruction and Development
IFAD	International Fund for Agricultural Development
IFPRI	International Food Policy Research Institute
IfW	Institute for World Economy
IMF	International Monetary Fund
MDG(s)	Millennium Development Goal(s)
MF	Microfinance
MFI(s)	Microfinance Institution(s)
MIX	Microfinance Information eXchange
MMA	Maputo Metropolitan Area
NGO	Non-government organization
odi	Overseas Development Institute
OECD	Organisation for Economic Co-operation and Development
SOCREMO	Sociedade de Gastao e Financiamento para a Promocao de Pequenas Projectos de Investimentos
SSA	Sub-Saharan Africa
ECA	United Nations Economic Commission for Africa

UNCDF	United Nations Capital Development Fund
UNCESCR	United Nations Committee on Economic, Social and Cultural Rights
WB	World Bank
WFP	United Nations World Food Programme
WR	World Relief
(C)	Communitary Group (Grupo Comunitário)
(E)	Special Group (Grupo Especial)
(I)	Individual (Individual)
(S)	Solidarity Group (Grupo Solidario)
C-M	Retail - Small Supermarket (Mercearia)
C-O	Retail – Other (Outro)
C-PA	Retail - Alimentary Products (Produtos alimentares)
C-Q	Retail - Small Store (Quiosque – varios)
C-R	Retail – Clothing (Roupa)
P-A	Production - Alimentary Products (Produtos alimentares)
P-A-C	Production – Alimentation Husbandry (Criação de Galinhas)
P-A-O	Production – Alimentation – Other (Ourtro)
P-O-Ca	Production – Handicraft – Carpenter (Carpinteiro)
P-O-Co	Production – Handicraft – Tailor (Costureiro – Alfaiate)
P-O-O	Production – Handicraft – Other (Outro)
(A)*	Alimentation-related products
(C)*	Construction-related products
(H)*	Household-related products
(M)*	Prime material
(N)*	No information
(R)*	Clothing - related
(V)*	Various
Cho	Chokwé
Map	Maputo
Mas	Massinga
Max	Maxixe
Vil	Vilanculos
Xai	Xai-Xai

1 Soaring commodity prices strain the world economy

1.1 Introduction

Over the past few years individuals around the world have experienced a substantial increase of their overall costs of living. The quickened pace of inflation of nearly all major commodities, including crude oil, metals, timber and food products, has already had sensible repercussions on most households - no matter whether residing in Bangladesh, Mexico or the European Union. Nonetheless, low-income groups, as to be found in large parts of the Southern African and Asian regions, are hereby particularly vulnerable and hence most likely to be affected above average by 2008's market developments. By the summer of 2008 a considerable share of the Third World administrations was no longer able to cover the basic alimentary needs of the local populations, ultimately causing millions of poor to be threatened with extreme poverty and famine.[1] Even tightened by the equally spiraling crude oil and energy prices, the economic situation in a number of developing countries had led to civil unrest, demonstrations and food riots which have eventually induced the international community to utter serious concerns with respect to conceivable response options.[2]

While governments and international aid organizations are classically charged with answering the most pressing humanitarian needs, past experience has unambiguously questioned the long term efficiency of instant financial support in solving such deeply rooted crises single-handedly. Consequently, the list of conceivable strategies has grown long. And among them, one in particular has gained much attention lately, owing to its exceptionally straight forward approach, i.e. the modern movement of microfinance. Designed as an alternative to the conventional banking system - which uses to exclude large parts of the Third World population - the concept of banking the "unbankable" has been performing remarkable well.[3] Conversely, questions have arisen whether this hard-earned progress may be jeopardized in the face of global food and energy crises such as seen during the early months of 2008. For subsequently to the ballooning costs of

[1] See FAO (2008), p.2.
[2] See IRIN (2008).
[3] See Goldberg (2005), p.46.

living, beneficiaries might run the risk of shortages in disposable income that could eventually render them unable to repay their micro-loans. Based on this very reflection then follows one of the central research questions of this paper. Said differently, the study contemplates the eventuality of the repercussions of commodity price inflation on the demand side for financial products to ultimately translate into adverse effects for microfinance institutions (MFIs) as well. To further elaborate this idea one may consider the fact that in their function as money suppliers for low-income groups MFIs might need to face potential irregularities with respect to incoming payments. In order to pool the increased risk in their client portfolio microfinance (MF) operators might consider alternative external and/or internal monetary funding aimed to secure their operative sustainability. Moreover, with the economic capacity of a number of their clients expected to decrease, microfinance institutions might be required to adapt their line of products and operational strategy.

Eventually, the aim of this paper is to assess the ability of both microfinance beneficiaries and institutions to weather such aggravated economic situations as witnessed until mid-year 2008. Following a comprehensive review on the impacts and causes of the mentioned price developments the study then evaluates microfinance as one of the more sustainable response options, all at once conceivable on international, country and household level. At the example of Mozambique the paper searches for viable answers to the following questions: Do the recipients of micro-loans demonstrate better coping capacities compared to the "regular poor"[4]? Do reactions to high price scenarios possibly vary between groups of microfinance clients and financial instruments? More precisely on the basis of an extensive case study AfricaWorks, a MFI in Mozambique, the study argues that in fact MF beneficiaries feature a superior economic security owing to a high level of stability in their entrepreneurial behavior. Client behavior would display no significant alterations and thus not prompt immediate policy adaptations on the institutional side. Eventually, the survey closes with a discussion on the potential room for strategic and operational maneuver MFIs may be faced with themselves in order to ensure their long term sustainability.

[4] "regular poor" – here to be understood in the sense of low-income earners not using microfinance instruments to sustain their household's economic situation.

1.2 Structure

In order to shed light on the matter in question the first chapter will retrace the decisive steps that led to the current crisis as well as its magnitude. Following an intuitive approach the study opens the discussion by assessing the status quo of global economy in face of the world food crisis. Based on recent reports the paper hereby attempts to quantify the impact of escalating commodity prices on the most vulnerable social groups in terms of poverty reduction and hunger. With the intention of providing a comprehensive picture, the debate then proceeds to examine the principal causes of the current level of inflation, among them figuring the general agro-climatic conditions, the declining productivity, as well as the soaring demand of emerging markets such as China and India.[5]

After the discussion regarding the underlying causes of the recent price acceleration, in Chapter 2 the paper then proposes to take a closer look at a number of measures conceived to answer the current situation on the short, medium and long run.

While the second chapter closes with a short introduction of microfinance as part of the various relief strategies, Chapter 3 then offers a more detailed description of the movement's historical background. In particular, the focus is hereby laid on microfinance's track record in the African context and its local peculiarities in comparison to the rest of the world.

As past experience has shown, institutions and strategies are as numerous as the continent's countries and their inhabitants' needs. At the example of the microfinance sector in Mozambique Chapter 4 therefore allows to follow more closely the development of a single market, starting from its early beginnings in the 1990ies to the more recent structural, sustainability-aimed transformations on the institutional side as well as in terms of services provided by the various local institutions.

Moreover, in Chapter 5 the detailed assessment of one of the market's oldest institutions, i.e. "AfricaWorks" (AW), may then be employed as a basis of comparison to other local practitioners – however, not necessarily depicting an identical development. In an attempt to cluster the intuitively distinguishable groups

[5] See FAO (2008), pp.5-14.

of AW's client portfolio the paper then applies Porter's diamond on the results of a survey that has been conducted among 184 borrowers to whom the institution offers assistance. On the basis of the empirical data gathered through this questionnaire, which is explicitly designed to examine the customers' capacities of coping with the risen commodity prices, AW has hence been able to obtain a first feedback from the field. Eventually, the findings regarding borrowers' behavioral responses allow for some valuable impressions and a better understanding of the clients' needs from which point AW may be able to deduct, initiate and/or confirm potential policy adjustments with respect to its strategic and operative framework.

In view of the to some extent contra-intuitive insights of the client survey as well as the renewed economic situation by the end of 2008 – meaning the significant relaxation of price pressure on global commodity markets – the sixth and last chapter then draws some general conclusions on the discussion and places the results again in their larger context. Considering the fact that high price scenarios can not be excluded from reoccurring in the future the paper closes on a short discussion on conceivable strategies designed to secure the MF market's sustainability. The institutional upgrade from a non-government organization (NGO) to a bank as well strategic service expansions towards agricultural MF (i.e. agribusiness) are contemplated and give room for further discussion and research.

1.3 Implications of increased commodity prices

More than crude oil, metals, or wood, food products represent the group of commodities that has the largest impact on individual households in low-income countries, independently of their role as consumers or suppliers of comestible goods. In a first step of analysis the paper will therefore place emphasis on the repercussions which accelerated food price inflation are expected to have on poverty and food security.

1.3.1 Low-income countries suffer most

Even though the phenomenon of food shortage has long been known to the world leaders most former measures have but treated its symptoms. The underlying structural deficiencies however have in most instances not yet been tackled effectively. In the face of historic growth rates of commodity prices preoccupations regarding food security in developing countries have recaptured the attention of the

media and policy makers. In consequence, the international community sees itself forced to question its past modus operandi in terms of poverty alleviation. As Lennart Båge, president of the International Fund of Agricultural Development (IFAD), pointed out just recently, neither donors nor governments could continue bargaining for inexpensive, affordable food to satisfy the hunger of the world's poor. After 25 years of excess supply the alimentary abundance has been replaced by an alarming level of world-wide scarcity that is now threatening millions with malnutrition and extreme poverty.[6] By approximations of the World Bank a number of more than 100 million individuals may be in need of assistance to cover their basic nutritional requirements.[7] "Long queues at subsidized food stores and higher price tags on almost all food items, not only on staple foods, are an everyday occurrence."[8]

Additionally, "soaring food grain prices in recent months have caused serious concern around the world"[9] as areas, formerly categorized as stable, now face civil unrest and a growing risk of political disturbances. After the latest escalations in Senegal, Cameroon, Mauritania and Burkina Faso in March 2008 the World Bank issued a warning for a total of 33 countries that may encounter a similar risk. Officials like Kanayo Nwanze, IFAD vice-president, are concerned that violent protests could become routine in more African countries.[10] Likewise, the Food and Agriculture Organization of the United Nations (FAO) has classified a number of 22 countries as being "particularly vulnerable due to a combination of high levels of chronic hunger (more than 30 per cent under nourishment), [a simultaneously high dependency] on imports of petroleum products (100 percent in most countries) and, in many cases, on imports of major grains (rice, wheat and maize) for domestic consumption."[11] 18 of them – and thus an equivalent of nearly 82 per cent – are hereby located in the Sub-Saharan African region. And while the level of dependency is naturally heterogeneous across the continent some countries display a particularly negative record in terms of vulnerability. Consequent to an import quota of over 60 to 100 per cent of petroleum and major grains, Niger, Eritrea,

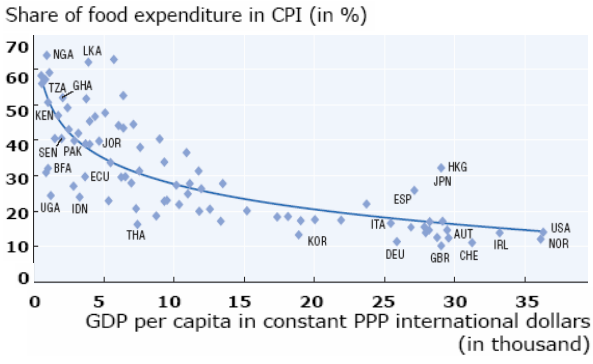
[6] See Pomeroy (2008).
[7] See WFP (2008), p.1.
[8] FAO (2008), p.16.
[9] Rahman et al (2008), p.4.
[10] See IRIN (2008).
[11] FAO (2008), p.17.

Botswana and Liberia turn out to be among the countries that have been most exposed to adverse price effects. Moreover, with percentages between 32 and 75 applying to the national share of undernourished people they score acutely high in all three risk factors that have been mentioned just above.[12]

1.3.2 Peculiarities regarding patterns of consumption

While in a number of low-income countries food sellers might expect their real revenues to rise in the long run, net consumers are in any case worse off and would thus be suffering from the increasing prices of staple foods.[13] As Figure 1 depicts, the average household in countries such as Ghana, Malawi or Senegal typically spends more than 50 per cent of its disposable income on food – in some cases the share even exceeds the 60 per cent. The households' budget in those regions is then critically low compared to the expenses that would be necessary to cover their basic nutrition requirements. As a consequence to this twofold financial burden most household's flexibility to buy provisions may be highly restraint. In other words, a high share of food expenditures implies that even a relatively moderate increase in domestic prices (i.e. under 20 per cent) is most likely to cause an immediate deterioration of the locals' living conditions - let alone an even higher level of inflation.[14]

Fig. 1 **Food expenditure shares and per capita income**



Source: OECD - FAO (2008), p.35.

Former studies, including the report on mid-year's world food situation by the International Food Policy Research Institute (IFPRI) predict an almost 0.6 per cent decline of overall food consumption in low-income countries as a reaction to a one per cent price increase. And while consumption patterns in high-income countries typically respond considerably less volatile than in poorer regions (by roughly a half), elasticity tends nevertheless to vary relatively similar between the different *groups of comestibles*. Consequently, in both low- and high-income

[12] See FAO (2008), p.17.
[13] See Ivanic/Martin (2008), abstract.
[14] See FAO (2008), p.31.

countries it is the consumption of dairy products which results to be most adversely affected by inflationary market developments – i.e., a one per cent price increase would lead to the reduction in consumer spending of 0.7 and 0.31 per cent respectively. Following comparable patterns, the demand for meat is then relatively responsive to inflationary trends, too, as households in poor as well as in developed countries would shorten their expenses by a respective 0.59 and 0.27 per cent in order to compensate for the one per cent price increase. Figures then suggest however that consumers are decisively less flexible in reducing alimentary consumption when it comes to the most basic foods that compose their alimentary diet. Not surprisingly, bread and cereals represent the least elastic nutrition component and would only lead to a relatively moderate decline of 0.43 per cent in developed and only 0.14 per cent in Third World countries.[15] "[…] most recent data on the food use of […] key cereals [such as maize, rice and wheat] have not shown a decline on a per capita basis. […] While this may change with the persistence of high cereal prices in the future, current trends suggest that given the importance of cereals as a major source of energy in the household diet, cereal consumption is highly inelastic to price changes."[16]

Fig. 2 **Consumption spending response for a 1% price increase (elasticity)**

	Low-income countries	High-income countries
Food	-0.59	-0.27
Bread and cereals	-0.43	-0.14
Meat	-0.59	-0.27
Dairy	-0.70	-0.31
Fruit and vegetables	-0.51	-0.22

Source: IFPRI (2007), p.6.

As considerably less obvious, but of no lesser importance, can be considered the compromising choices particularly poor households are faced with due to the sensible reduction of their purchasing power. According to the World Food Programme (WFP) and the FAO the most common response to food price inflation represents the substitution of higher-quality sources of protein and basis nutrient modules by more affordable and higher-energy yielding comestibles. In addition to the direct reduction in terms of food quality and/or quantity, a large share of the low-income population finds itself forced to compromise on other "dispensable"

[15] See von Braun (2007), p.6.
[16] FAO (2008), p.28.

non-food expenditures, including medical care and education.[17] A sample calculation for a Bangladeshi household consisting of five persons, living on one dollar a day each predicts the following effects should food and energy prices increase by 50 per cent.

The following, numerical illustration may offer a very simple but striking example. With a total disposable income of $5 per day the depicted household spends $3.00 on food, half a dollar on energy and another $1.50 on non-foods, equivalent to a repartition of 60, 10 and 30 per cent respectively. Should food and energy prices increase by 50 per cent the household would have to pay $5.25 instead of $3.50 for the first two commodity groups alone. It becomes obvious that the additional $1.75 is then impossible to be covered by the household's initial budget. Even by substituting the remaining value of $1.50, and thus all further consumption of non-food articles by energy and food products the price increase would cause a deficit of $0.25. In other words, this household does not exhibit enough resources to cope with the increased costs of living.[18] While exemplifying the case of a Bangladeshi family, the striking simplicity of the example underpins the harsh reality of over a billion individuals living in extreme poverty around the globe. In an attempt to manage the aggravated financial situation a number of households opt for the liquidation of physical assets or respectively to run into further debt as the deficit of $0.25 in the above example indicate.[19]

Fig. 3 **Price effects on households living in extreme poverty**

Daily income:	**$5.00**	
Daily expenses:		
on food	*$3.00*	**50 % price increase**
on energy	*$0.50*	
on non-food articles	$1.50	**Substitution**
50 % increase of food & energy prices	$1.75	
Price Effects	**-$0.25**	**Shortage**

Source: von Braun (2008a), p.32.

1.3.3 Increasing poverty

Before examining and quantifying the correlation between increased commodity prices and poverty it might be expedient to review the very definition of poverty itself. Down to the present day opinions differ with respect to the basis on which the measurements of poverty should be based upon. Both, the absolute and relative standard find their advocates, depending on whether the latter prioritize the

[17] See FAO (2008), p.16.
[18] See von Braun (2008a), p.32.
[19] See WFP (2008), p.1.

individual or social character of a human being.[20] Should one consider humans primarily as members of a society, poverty can easily associated with inequalities and sizeable income spreads. Easily one distinguishes between rich and poor countries as well as people may be willing to endorse the idea that being poor in European Union is not equivalent with being poor in Sub-Saharan Africa.

For reasons of coherence and international comparability most development institutions resort to a quantitative rather than qualitative approach, thus conducting measurements based on absolute indicators.[21] For a long time fixed at $1 per day, the so called poverty line has been redefined – or rather adjusted – in 2008 by the World Bank (WB), and with $1.25 per day now constitutes the new threshold values for extreme poverty. This merely income-based assessment seems however insufficient when aiming to comprehend the more complex concept of poverty.[22] In an attempt to broaden the view, other institutions have hence adopted a more qualitative approach. The latter would then take into consideration the intended purpose of the financial resources, at which the question focuses on whether the disposable income capacitates the individual to meet the required minimum intake of calories per day.[23] As the most comprehensive of the three examples given here, the United Nations Committee on Economic, Social and Cultural Rights (CESCR) agreed on the following definition that would acknowledge the multidimensional nature of poverty more adequately:

> *"Poverty is a human condition characterized by sustained or chronic deprivation of the resources, capabilities, choices, security and power necessary for the enjoyment of an adequate standard of living and other civil, cultural, economic, political and social rights*."[24]

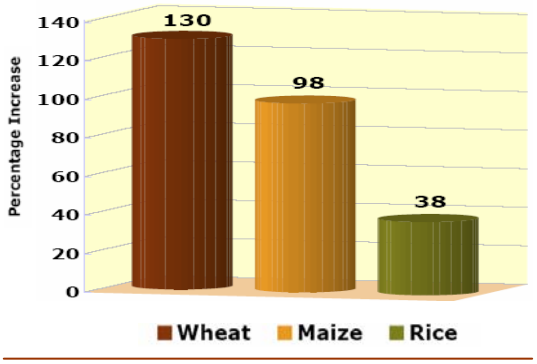
Having followed this admittedly short introduction, it becomes evident that the discussion on poverty could be substantially deepened. For the scope of this study however, the intuition derived from the above given overview shall suffice. In other words, the restricted choices which low-income households find themselves

[20] See O'Boyle (1998), p.1411.
[21] See loc. cit.
[22] See World Bank (2008b).
[23] See O'Boyle (1998), p.1411.
[24] United Nations (2001a).

confronted with when choosing between food, education and health care do reflect quite aptly the preceding definition. And hereby easily link this short excursus to the overall discussion of the paper. In acknowledgment of staple foods being a crucial factor in the daily decision-making the following section will provide some quantitative insights with respect to the respective commodity prices as well as the increasing number of individuals living in extreme poverty.

In a background paper for a High-Level Conference on World Food Security in June 2008 the FAO reports an eight per cent increase in 2006 and another 24 per cent surge in 2007 of the overall food price index. „The [pronounced inflationary price development] is led by vegetable oils, which on average increased by more than 97 percent during the same period, followed by grains with 87 percent, dairy products with 58 percent and rice with 46 percent. Sugar and meat product prices also rose, but not to the same extent."[25] Subscribing to the same discussion, the Asian Development Bank (ADB) then also quotes the FAO when highlighting the significant price accelerations for the case of three major staple foods, namely wheat, rice and maize. Between March 2007 and March 2008 export prices of those commodities rose by a respective 130, 98 and 38 per cent.[26] In Mozambique maize price inflation even amounted to 43 per cent in that very period, rendering a traditionally cheap staple into a considerably more cost intensive comestible.[27] And although price levels are not expected to sustain the 2008 mid-year's nominal record highs, a projection of the OECD until 2017 concludes that wheat and maize prices for example will eventually settle above their 2005 values.[28] All in all, views of food security experts, governments and international aid organizations converge as they are expecting overall food prices to persist on a higher average level.[29]

Fig. 4 Changes of export prices of staple foods between March 07-08 (%)



Source: Rahman et al (2008), p.4

[25] See FAO (2008), p.3.
[26] See Rahman et al (2008), p.4.
[27] See IFAD (2008b).
[28] See OECD - FAO (2008), p.47.
[29] See FAO (2008), p.14; see also World Bank (2008a), p.1.

Findings of the World Bank suggest that the exact impact on poverty might "differ considerably by commodity and […] country"[30] as the alteration in welfare depends eventually on whether rent surpluses of poor producers are able to outweigh the losses that consumers of low incomes are likely to incur due to the higher prices. Furthermore, a particular household's ensuing situation is then typically conditioned by additional factors including the actual products involved, its patterns of income and expenditures as well as prevailing institutional policies. Despite the regional differences research attributes poverty the tendency to generally increase much more frequently and pronouncedly than it would eventually fall. The net effect of the latest upsurge of the world-wide commodity prices is therefore expected to translate into a substantial amplification of overall poverty.[31]

A recent study effectuated by Maros Ivanic and Will Martin of the World Bank's Research Group on Trade attempted to quantify the adverse welfare effects on household level in the context of low domestic incomes. For this purpose, information was gathered from nine sample countries, namely Bolivia, Cambodia, Madagascar, Malawi, Nicaragua, Pakistan, Peru, Vietnam, and Zambia. Through a comparatively simple yet data-intensive methodology the authors were able to calculate the short-term impacts of altered staple food prices on a representative household's income and living expenses. Adjusting them to the 2008 prices hikes and the simultaneous dollar depreciation the model averages a 4.5 per cent point increase of people living on one dollar a day or less. The extrapolation of the results to all developing countries, and thus to an estimated number of 2.3 billion poor, yields to an impressive figure of 105 million people who may slide into extreme poverty. Rephrased this means that a renewed hike of penury (by 4.5 per cent points) would be equivalent with a setback in poverty alleviation of almost seven years when measured in values of 1984 and an average annual reduction of 0.68 per cent.[32]

While to be treated with appropriate caution, the study's calculations seem to confirm the international community's concern regarding the negative repercussions higher food prices are expected to imply for low-income countries. Should absence

[30] Ivanic/Martin (2008), abstract.
[31] See loc. cit.
[32] See loc. cit., p.20.

of viable alternatives prevail many of today's poor and hungry will remain in serious distress. In addition, both the high level of vulnerability and the enduring dependency of Third World countries on foreign food aid could critically endanger the achievement of the very first of the Millennium Development Goals by the year 2015.

1.3.4 The Millennium Development Goals and Food Security

In the year 2000 world leaders agreed upon an action plan, designed to foster economic growth and social progress in the poorest and least developed countries of the Third World. The so-called Millennium Development Goals (MDGs) comprise eight central goals, 15 targets and 44 indicators based upon 1990 data as a benchmark.[33] In 2008, seven years prior to the 2015 target date, progress reports are heterogeneous both with respect to countries and the goals themselves.[34] While countries in Sub-Saharan Africa such as Mozambique and Angola are most likely to achieve the second MDG, i.e. universal primary education, large parts of the continent continue to display a serious delay regarding the remaining key tasks. Especially the eradication of extreme poverty and hunger seems practically unachievable; for already in 2007 the "halving of extreme poverty by 2015 [would have required] that the current pace is nearly doubled"[35] - not to mention the highly inflationary food prices developments the world has witnessed in 2008. The situation is precarious and the dynamics in global economic climate are not exactly facilitating the process of catching up. While other developing regions were able to improve their social and humanitarian conditions, most countries in Southern Africa feature a considerable slower advancement and clearly trail behind the rest of the Third World. High levels of maternal and child mortality, gender inequalities, HIV and

Fig. 5 **The Millennium Development Goals**

MDG 1:	Eradicate Extreme Poverty and Hunger
MDG 2:	Achieve Universal Primary Education
MDG 3:	Promote Gender Equality and Empower Women
MDG 4:	Reduce Child Mortality
MDG 5:	Improve Maternal Health
MDG 6:	Combat HIV & AIDS, Malaria & other Diseases
MDG 7:	Ensure Environmental Sustainability
MDG 8:	Develop a Global Partnership for Development

Source: Chipika (2007), pp.63-64.

[33] See Chipika (2007), p.1.
[34] See United Nations (2007), pp.1-2.
[35] Loc. cit., p.1.

AIDS as well as insufficient levels of sanitation and a guaranteed access to safe drinking water in rural areas persist to pose major challenges.[36]

Additionally, the widespread incapacity of local authorities to provide satisfactory social safety nets has severely hampered the respective countries to become more self-reliant.[37] Instead large parts of the continent still depend heavily on foreign assistance, including international food aid. Compared to other developing countries Southern Africa "is the only region in the world where the number of extreme poor has risen [instead of fallen] over the past fifteen years"[38] - and where governments are being notoriously unfit to assure the basic provision for the general public. In view of the long lasting debate and the consequently broad range of literature on this topic it seems useful to define two of the central concepts associated with the MDGs, namely food security and self-sufficiency.

Fig. 6 **Food Self-Sufficiency**

A country's capability to meet its citizens' aggregate food needs – in both quantity and volume – primarily based on its own domestic resources. Domestic food supply is thus implied to meet domestic demand.

Food Security

Food security is attained in case a country is able to guarantee physical as well economic access to basic nutritional supply for all its citizens, both on the short and long run.

Source: Kalibwani (2005), pp.7-8.

The above given definition of food self-sufficiency does not automatically refer to the economic access nor the eventual capability of consumption on household level. Due to the aggregation of data a country's self-sufficiency does consequently not qualify as an unambiguous indicator for an individual household's food security. In the context of an example it is easily conceivable that substantial disparities persist if means of production and distribution are concentrated in the hands of a minority while large parts of the population are deprived of adequate food access, even suffering severe malnutrition and hunger. A country could therefore fulfill the criterion of food self-sufficiency while a considerable share of its citizens might not.[39]

[36] See United Nations (2007), pp.1-3.
[37] See Maponga/Mastaki Namegabe/Mutangadura (2007), p.5.
[38] United Nations (2007), p.3.
[39] Kalibwani (2005), pp.7-8.

In contrast to food self-sufficiency the concept of food security allows for a broader perspective as it accommodates both quantitative and qualitative variables. When speaking about food security a comprehensive discussion should appraise notions such as income, dietary values and capabilities of crisis management in case of food shortages. The combination of those variables would then allow for an adequate assessment of an individual household's degree of vulnerability.[40] In conjunction with a timeline analysis the definition can be refined even further, as it is possible to differentiate between transitory and chronic food insecurity. The latter hereby "refers to a continuously inadequate diet caused by the inability to acquire food"[41] while in a transitory state households may only suffer from a temporary deterioration of suitable food access. In other words, the theory of food security installs an explicit link between the concepts of individual food access and poverty.

Numerous studies conducted on this subject provide evidence that in most Sub-Saharan African countries neither food security nor self-sufficiency could be achieved in the past. For more than three decades autonomous supply in staple foods such as wheat, cereals, maize, rice and sugar has been unsatisfactorily low and heavily supported by imports and foreign donations. In view of the consistent under-performance of African countries questions arise regarding the potentially adverse and thus ambiguous (side) effects of international aid. It is not much of a surprise that only a few countries are expected to attain the second target of the MDGs until the year of 2015 (i.e. cut the number of under-nourished people by 50 per cent). Among the states that display the highest propensity to halve the proportion of their citizens suffering from hunger figure again Angola and Mozambique, as well as Lesotho, Malawi and Namibia. Others like Botswana and Swaziland have on the contrary seen the share of undernourished individuals rise between 1992 and 2002 (so far, no more recent data is available on this indicator).[42] As in all these countries the rural sector still plays a major role in generating individual and institutional income, the agricultural market – in many cases more than the commerce of raw materials – displays the largest potential to advance

[40] See Kalibwani (2005), pp.7-8.
[41] Kalibwani (2005), p.8.
[42] See Chipika (2007), pp.8-9.

economic growth. Considering the long lasting nature and ramifications of the structural deficiencies in Sub-Saharan Africa (SSA), it is imperative to study both symptoms and underlying causes of the latest food price developments. Otherwise, any detailed discussion on sustainable solutions would lack its foundations.[43] In the following sections the paper will therefore present the principal factors that have largely conditioned 2008's global commodity price acceleration, again focusing mainly on the developments of the markets for food products.

1.4 Prominent factors contributing to rising commodity prices

Although their accurate contributions fail the attempt to be quantified, among the numerous factors that influence on the complex development of global food prices some can be seen higher ranking than others. With the intention to facilitate the reader's understanding of their interaction the paper hence proposes a classification of the factors into four principal groups. The first dimension can be deducted by following a timeline approach where we may distinguish between cyclical and structural factors that are expected to affect food prices. Intuitively, cyclical factors are of temporary nature and may be eased over the following twelve months – however most likely to reappear at some point in the future. Structural factors in contrast refer to medium and long term phenomena which indicate a persisting alteration of the operational environment.[44] On the other hand, the market dimension then comprises demand and supply side related parameters that are assumed to influence the actual price development.

While the combination of time and market dimension can then be resumed by the 2x2 matrix depicted in Annex 1, the paper acknowledges the simplicity of the proposed model. Undoubtedly, some factors feature both demand and supply side characteristics. Even more, in some cases a particular event might be labeled as a short term occurrence while its actual impact refers to a rather long term trend. It becomes clear that the real interaction of the various factors is far more complex than depicted in the following introductory discussion. For also the various

[43] See von Braun (2008b), p.7.
[44] See Rahman et al (2008), p.6.

commodities often display a non-linear relationship to each other.[45] For the sake of clarity however the chosen approach stays comparatively straight-forward and the following example shall only shortly clarify a corresponding case.

Considering the stimulus of a boost in demand on commodity prices –as to be witnessed over the past few years in Asia's rapidly expanding economies – it becomes apparent that the same effect is acting on all types of commodities, meaning both food and non-food products. Thus meat, rice and sugar for example would experience an upwards price movement, just as well as crude oil derivatives, metals or minerals would.[46] At the same time however, there is another causal effect to be noted between the commodities themselves, for rising costs of raw materials such as crude oil would simultaneously translate into higher costs of production in the food industry, too. In form of increased expenditures for fertilizers, power and transportation, energy prices do hence directly affect agricultural input factors – while the general demand boost acts consequently on both direct and indirect ways on food global prices. In recent years a third mechanism has become apparent, also exercising pressure on output prices: In the face of opportunity costs producers nowadays see themselves forced to choose between the traditional agricultural production and the highly profitable biofuel sector. More and more often, the latter, more profit-earning business prevails.[47]

In view of these observations the following sections will therefore assess the underlying forces that condition commodity price inflation of food and non-food products, as well as discuss their respective relationship to each other where necessary.

1.4.1 Weather-related shortfalls in production

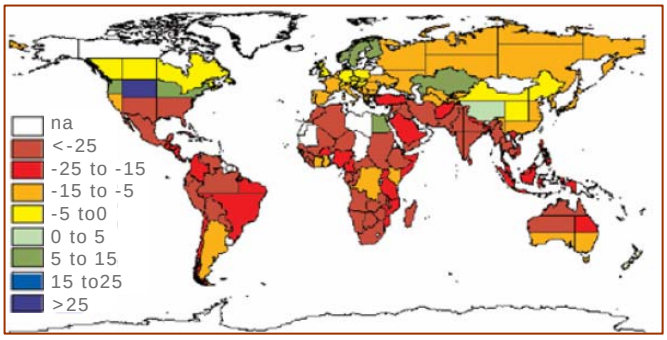
Pronounced price movements of agricultural products are by far no rare occurrence. For shortfalls in production resulting from adverse agro-climatic events are the very definition of volatility in the agricultural markets. Statistics indicate that

[45] The relationship between the various commodities may at times display a high level of complexity, ranging from distinct goods' respective reactions to particular market stimuli, to a causal connection where price trends in one market would entail direct or indirect price changes for other commodities, too.
[46] See Rahman et al (2008), p.9.
[47] See loc. cit., p.7.

for two consecutive years world annual cereal production fell by almost 4 and 7 per cent respectively before recuperating in 2007. As one of the largest crop producers worldwide, Australia in particular has been suffering continuously from unfavorable weather conditions - mostly in form of persisting droughts. Jointly with Canada, another major exporter that has been experiencing serious shortfalls in production, their yield outcomes dropped by an aggregated 20 per cent in those two years, and are hereby only reflecting the under-average performance of large parts of the sector.[48]

While "in previous periods […] agricultural price hikes [typically leveled off into a] long-term decline in real prices"[49] current data suggest that the industry is presently undergoing some fundamental changes. Investing into agriculture becomes more and more risky as the adverse environmental impacts mentioned above render the already hardly predictable profits even more volatile. Significant losses due to devastated harvests seem to have increased over the past few years as extreme weather events like floods, hurricanes and droughts have multiplied in large parts of the world.[50] Despite the fact that accurate measurements of the correlation between future crop outcomes and particular incidents related to global warming remain by nature difficult to perform, agriculture's increasing vulnerability to climate change has been recognized by the large majority of global policy makers.[51] And again, today' least developed countries are most likely to bear the brunt should one believe the projections that have been presented in early 2008 by Joachim Braun, director general of IFPRI.[52] Countries which feature only limited capacities to adapt to climatic changes face an imminent thread to their agricultural production. Eventually, numbers of undernourished people living in those geographically

Fig. 7 **Impact of climate change on agricultural production by 2080 (in %)**



Source: von Braun (2008a), p.35.

[48] See FAO (2008), p.5.; see also OECD - FAO (2008), p.40.
[49] FAO (2008), p.4.
[50] See Ki-moon (2008).
[51] See Rahman et al (2008), p.9.
[52] See von Braun (2008a), p.35.

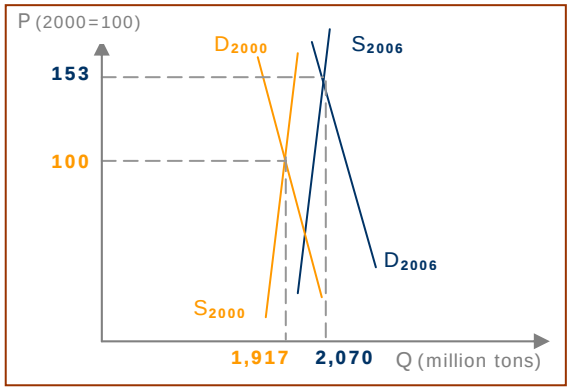
unfavorable regions could multiply – in Sub-Saharan Africa even triple – between 1990 and 2080.[53] Consequently, the careful and well organized investment in the rural sector becomes indispensable despite the above mentioned risk of weather-related profit cuts. A deeper discussion follows at the occasion of introducing the various relief strategies.

In order to minimize the ecological footprint and guarantee sustainable development many strategies have been devised so far. Besides the international trade of emission rights and the development of renewable energies, the market for biofuel has experienced a virtual explosion over the past few years. However, neither a coordinated approach nor internationally implemented and binding regulations have been found yet and for some of the undertaken measures the contributions to mastering the global challenge remain even questionable. More details shall be given at a later state of discussion; first when discussing the implications of "green fuels" on agricultural output prices and secondly in conjunction with the evaluation of reforms in rural production that figure amongst the various exit strategies designed to confront the current food crisis.

1.4.2 New players on the demand-side – China and India

In contrast to past market trends where high-price events had the tendency to be rather short lived in comparison to the typically longer lasting low-price scenarios, today's "observed increase in food prices is not a temporary phenomenon, but likely to persist in the medium term."[54] Besides the natural population growth and urbanization one decisive structural factor on the demand side is unquestionably the rising demand of emerging economies such as densely inhabited India and China. "In [the latter], the number of [individuals] living on less than

Fig. 8 **Global supply and demand for cereals (2000 and 2006)**



Source: von Braun (2007), p.5.

[53] See von Braun (2007), p.12.
[54] World Bank (2008a), p.1.

$1.25 a day in 2005 prices has [fallen] from 835 million in 1981 to 207 million in 2005."[55] This marks a drop of more than 600 million people, or in other words, a decline of the national poverty rate from 85 to 15.9 per cent. China thus accounts for nearly the total of global poverty reduction over the past three decades.

In conjunction with the rising welfare levels in China and India, consumption patterns are changing as well considerably, consequently stimulating the domestic demand as people aim to meet the new standards of living. Due to a greater share of animal-based comestibles in the daily diet (referring among others to milk, eggs and meat) grain demand has accelerated dramatically over the past decade. What at first view may appear contra-intuitive stems from the simple fact that the livestock industry in particular requests an increasing share of corn production for its feeding purposes. The traditional Asian diet, which so far used to consist largely of cereals and rice-based dishes, sees itself gradually replaced by more hearty meals. As seen before, the preparation of meat-based repasts then requires a greater amount of crop as forage than the direct consumption of cereals would have demanded - nonetheless not generating a superior calorie intake.[56]

In comparison to price levels in the year 2000, meat has turned out to be twice as expensive in 2007, while dairy products such as milk and butter saw their prices even triple over the same period of time. Likewise, consumption of fish, meat and eggs in India has risen by a fifth since 1990 while consumers in the People's Republic of China demanded not less than 250 per cent more meat than 17 years ago. Particularly among the low-income and poor quintiles of the Chinese population the rise in demand is increasingly exceeding the respective income growth. In times of globalization the declining levels of poverty in the world's two most populous states – while undeniably of beneficial significance for the local population – have clearly far-reaching, in many cases somewhat ambiguous effects on all other economies. And until proved otherwise, economists' projections indicate this trend to continue in the short and medium term.[57]

[55] World Bank (2008b).
[56] See Rahman et al (2008), p.9.
[57] See loc. cit.

1.4.3 Declining stocks and the higher level of market interdependencies

Since markets display an ever increasing level of interdependence their convergence naturally translates into a significantly higher sensibility to single countries' activities on both the demand and supply side. The altered patterns of consumption of prospering nations in Asia do however not fully account for the sudden price hikes but rather explain the dwindling of global cereal stocks over the past decade.[58] Then again it seems plausible that the combination of declining stocks and an increasingly integrated world economy has encouraged the trend towards speculative demand. Throughout the past year, financial assets have lost some of their former appeal in comparison to feasible commodities. Due to higher levels of risk and volatility on the agitated financial markets investing in tangible assets such as raw materials and food is economically profitable, for the demand elasticities of groceries for instance are acutely low. In other words, staple foods and crude oil will find a buyer eventually since eating and heating represent basic human needs.[59][60]

1.4.4 Rising costs of production – energy, fertilizers and transportation

As worldwide demand is growing supply is slow to reply. While the level of productivity has been declining steadily over the past decades, the costs of production are displaying a continuous upwards movement until mid-year2008 and hence have not provided enough incentives to accelerate the adjustment of output quantities.[61] With both an agricultural sector producing ever more and more energy-intensively over the years and a simultaneous price increase for the energy deployed, key inputs such as fuel, power and fertilizer have become critically more expensive. Compared to January/February prices of 2007 Triple Superphosphate and Muriate of Potash, two of the most common fertilizers in agricultural production, have seen their US dollar prices increase by over 160 per cent during the first two months of 2008. In fact, the trend is recurring for a number of other input factors that would adversely affect overall costs of production, too. It is therefore not surprising that with freight rates having doubled between February 2006 and February 2007 food

[58] See FAO (2008), p.12.
[59] See Rahman et al (2008), p.6.
[60] For further details refer to Annex 2.
[61] See Rahman et al (2008), p.8.

imports in a number of developing countries are likely to decrease as a consequence to the increment of transportation costs.[62] In many cases, the cultivation of crops itself has experienced a sharp price increase due to higher costs associated with the usage of more and more sophisticated grains varieties over the past couple of years. Those seeds, while higher-yielding, would thus parallely require a higher level of energy and irrigation than the conventional cultivars.[63]

Already between 2002 and 2007 have oil prices displayed an average growth of US dollar 10 per year. During the first term of 2008 however, the market values for a barrel of crude oil have experienced an unprecedented acceleration, jumping from one record high to another. So far, the peak has been reached on July 11, when crude oil was listed at a bit over $147 per barrel.[64] Although the daily price changes can be labeled as short term variations of the market value, the underlying nature of rising oil prices rather indicates a long term trend which reflects the structural disproportion of growing demand relative to the stagnating supply rate of oil. Many Asian countries for instance have seen their prices rise between 20 and 50 per cent in spite of the local authorities subsidizing the domestic markets. Given those observations it clearly emerges that the demand growth in those regions has accelerated quite disproportionately when compared to the actual oil supply.[65]

Consequent to the looming insecurity of energy available on the long run, both public and private sector participants have in many countries adopted a more proactive attitude. By exploring the various alternatives to fossil fuels they are hence trying to find adequate answers to the increasing scarcity of the traditional energy sources.[66]

1.4.5 Biofuels and the alternative use of agricultural commodities

Over the past few years the significant and continuous price increases of crude oil have allowed traditional food and/or feeding commodities to become economically viable substitutes for fuel production. Crops which have previously been used predominantly in the food processing industry are now asserted to yield

[62] See FAO (2008), p.7.
[63] See Rahman et al (2008), p.7.
[64] See No author (2008b).
[65] See Rahman et al (2008), p.7.
[66] See World Bank (2008a), p.1.

higher profits when alternatively being deployed in the energy sector.[67] The diversion of cereals to serve as raw material for biofuels has been fostered even further by the large institutional subsidies in some of the most important producing countries. The latter have then contributed decisively to the recent attractiveness of "energy-crops" by allowing substances like ethanol and biodiesel to become increasingly competitive compared to petrol. Consequently, the demand for grains such as maize, wheat or rice soared by a remarkable 25 per cent between 2000 and 2007. In comparison, the global demand for crops destined for food and feed production has displayed a rather moderate growth in the same period, amounting to only four and seven per cent respectively. In the Unites States the share of "energy-crop" relative to the total of peasant commodity production has jumped from six to 23 per cent in the last three years. Additionally, in a number of cases those pronounced market developments have then entailed the substitution of products like sugar, soybeans and palm oil by more energy yielding crops such as wheat and rice.[68] "The increase in demand for these commodities has been one of the leading factors behind the increase in their prices in world markets which, in turn, has led to higher food prices."[69]

At the current state the booming market for biofuels is converting roughly 100 million tons of grains annually. In order to satisfy the incremental demand in grains, land which had formerly been intended for the cultivation of crops to be processed for human consumption, nowadays experiences a speeding diversion to an urban and industrial use. Consequently to the increasing competition on the demand side, prices of corn, wheat and other grains rise quickly and the supply availability is noticeably lessened in the food processing industry. Meanwhile, a similar development can be observed for the case of another scarce resource: freshwater constitutes a major input factor in agriculture. As a result of the accelerating urbanization and industrialization in many developing countries more and more water is consumed by private households and/or companies other than agribusinesses. In the coming decades, essentially populous countries which are subjected to rapid

[67] See FAO (2008), pp.7-8.
[68] See Rahman et al (2008), p.7.
[69] FAO (2008), p.7.

societal transformations - features certainly applying to both the PRC and India - will face major challenges in managing the increasing water scarcity.[70]

1.4.6 Insufficient supply due to deficiencies in agricultural production

In addition to the distress posed by water management and irrigation many of today's developing countries suffer from a far more complex combination of interdependent factors that imperil the good-functioning of their agricultural sector and eventually of the sufficient food supply. In Southern Africa for instance, the adverse effects of continuously unsuitable government policies have considerably weakened the capability of many economies to sustain themselves; not even to mention the impotence to weather the acceleration of global food prices based on their domestic production. Besides the "narrow [supply] base with ill-adapted technology; the neglected informal sector; the degrad[ation of the] environment [and] the fragmentation of the economy"[71], also the disregard of women's central role in food production has eroded much of the continent's independence.[72] Despite the impressive number of roughly 450 million small farmers operating in developing countries worldwide and providing nearly 2 billion people with staple foods, the majority of the less- and least-developed countries in question display an acute under-performance of the agricultural sector.[73] At the current state of development the majority of those countries situated in the Sub-Saharan African region are not expected to be able to contribute appreciably to close the global gap in food supply.

1.5 Intermediate insights

Evaluating the status quo of the world economy until mid-year 2008 the paper discerns the highest level of vulnerability towards high price scenarios in developing countries. Subsequent to the preceding impact study and the examination of the underlying causes which lead to the mentioned high price scenario Chapter 2 discusses the various response options and relief strategies by the international community.

[70] See Rahman et al (2008), pp.7-8.
[71] Kalibwani (2005), p.9.
[72] See loc. cit.
[73] See IFAD (2008a), p.2.

2 Response strategies by the international community

The complexity of the latest food and energy crisis, both in terms of causes and consequences has called for an equally instantaneous and comprehensive response which would be unambiguously supported by the entire international community. In order to ensure world-wide food security the devised strategies should comprise "elements of global, regional, and national actions, all of which have shorter- and longer-term dimensions."[74] Considering the different levels of urgency of the various interventions as well as their divergent degree of sustainability the subsequent discussion will on the whole follow a timeline approach. Consequently, one shall differentiate between short, medium and long term assistance, noting that a focus on mere emergency mitigation would fail to provide a viable solution to the deeply-rooted, structural crisis. In order to allow for the vital resilience and stability of the global food system a part of the measures undertaken should therefore follow a long term goal rather than the mere immediate response strategies. Typically, those plans comprise a set of actions which would be launched at the present day, while their actual impact however becomes apparent but with a certain delay to time.[75]

2.1 Immediate impact actions

According to a proposal issued by the World Bank policy and government interventions can be roughly categorized into three main groups:

(a) all actions intended to ensure low-income households' food security through strengthening targeted *safety nets,*

(b) state interventions, including short-run alternations of the national trade policies, designed to *lower domestic food prices*, and

(c) *medium and long-run interventions* that would eventually enhance the overall food supply via the improvement of the prevailing structures of production.[76]

The graph depicted in Annex 3 provides a preliminary overview regarding the effectiveness and applicability of the most commonly employed policy options in the very short, short and medium run. In terms of immediate impact actions – thus

[74] von Braun (2008b), p.7.
[75] See loc. cit.
[76] See World Bank (2008a), p.3.

figuring among the safety net programs **(a)** and the policies to reduce domestic food prices **(b)** – governments may for instance draw on cash or near-cash transfers to the most vulnerable households. Typically, the latter are hereby handed out food stamps or may alternatively benefit from a financial support contingent on the fulfillment of certain requirements, e.g. an income beneath a specific threshold value, the household's location in a particularly unfavorable zone or the type of occupation a low-income earner is pursuing. In other cases the reception of monetary aid may be conditioned upon parental behavior such as sending their children to school or to see a doctor.[77] While financial or material transfer systems may reach a high level of target and cost efficiency which tends to preserve production and labor incentives, too, their implementation often remains a major challenge to local administrations.[78]

Nevertheless, at the current state sundry variations of cash transfer programs are used in low-income regions around the globe, among them figuring countries such as Tunisia, Brazil, Mexico and China. Consequently to the latest high price scenario on global markets, adjustments of already running programs have however been necessary in order to answer the pressure of risen food prices. In Ethiopia for instance, prices for staple foods displayed an inflation rate of roughly 23 per cent between February 2007 and February 2008. As a response, local authorities have conceded to adapt the cash wage rate of one of the major cash-for-work programs in the region by 33 per cent, aiming to offset the adverse inflationary effects. Other examples are also given by Southern African countries such as Mozambique and Burkina Faso or the Central American state of Honduras where governments promote school feeding programs which attempt to sustain, and where possible to improve, the daily intake of calories of the pupils as well as their families.[79]

On the grounds of a public briefing paper dating from April 2008, the Overseas Development Institute (ODI) has issued similar proposals with respect to immediate response systems. In order to alleviate the most vulnerable groups' distress associated with the global food price inflation, the United Kingdom's leading independent think thank also recommends a direct financial and/or material

[77] See World Bank (2008a), p.3.
[78] See loc. cit, p.12.
[79] See loc. cit., p.3.

transfer to the poor, distributed in form of vouchers or cash.[80] Alternatively, the ODI as well as the World Bank have been discussing various schemes to support the purchasing power of low-income households by lowering the domestic prices for staple foods. The regulation of market prices, either through price ceilings, widely used export taxing or lately the reduction of tariffs on food imports, might however induce ambiguous effects. Not only could the institutional price setting at times result difficult to enforce, but also do governmental – and hence market-external – regulations such as food price subsidies typically represent further distortions. Consequently, interventions might eventually even entail the risk of severely weakening market-internal incentives for producers and act rather counterproductively when it comes to a larger output generation.[81]

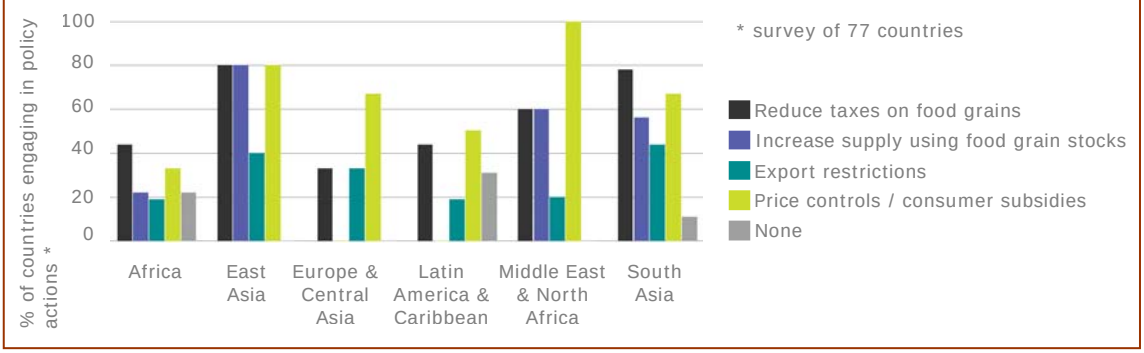
On the other hand, a number of countries which have imposed tariffs on food imports in the past – both to foster domestic production and revenues – now respond with tax and tariff reductions intended to cushion the latest price surges. The cut in fiscal revenues, accordingly caused by losses in the domestic tax income, can however result significant and on the long run seems to represent no sustainable solution for Third Word countries – especially when considering that for most parts their Gross National Product (GNP) proves to be acutely low even without the additional expenditures for social safety nets.[82]

What becomes obvious when comparing policy options in different countries are the outreach and level of efficiency of the various response measures being closely correlated to the general stage of a region's development. Governments in South and East Asia as well as North Africa and the Middle East for instance have already implemented an extensive package of interventions that comprises elements out of each of the following categories: the reduction of taxes on food grains **(1)**; the increase of supply using food grain stocks **(2)**; export restrictions **(3)**; and price controls or respectively consumer subsidies **(4)**. When drawing a comparison between all six regions (see Fig.9), policy option **(4)** stands out as the most frequently employed, meaning that with the exception of Sub-Saharan Africa more

[80] See odi (2008), p.3.
[81] See World Bank (2008a), p.4.
[82] See loc. cit.

than half the sampled governments make usage of this instrument. On the other side, Latin America and the Caribbean as well as Southern Africa which are both counting among the least developed regions in the world exhibit an acutely low activity in policy implementation. 30 and 20 per cent of their local administrations respectively state even no attempts of intervention at all.[83]

Fig. 9 **Regional use of policy response options designed to address food price inflation**



Source: FAO (2008), p. 42.

Varying among countries, some strategic options may be rendered less feasible than others, largely depending on the administrative capabilities to implement the mentioned policies. "The precise choice will depend on the extent to which some form of safety net or social protection mechanisms are already in place and can be mobilized."[84] Self-targeted food-for-work programs such as mentioned earlier in the context of Ethiopia hereby represent some of the preferred response options which then again often suffer a limited applicability. While reducing costs which would otherwise incur should local authorities have to run thorough screenings themselves, auto-running programs like households' self-targeting are contingent on the well functioning of communication and distribution channels. In most cases the institutional framework in developing countries does however display critical deficiencies with respect to the mentioned preconditions.[85]

Especially regions such as SSA or South-East Asia exhibit an acutely low level of logistical and operative effectiveness. Eventually, the absence of a functioning network of the channels of communication is causing the physical

[83] See FAO (2008), p.42.
[84] Loc. cit., p.44.
[85] See World Bank (2008a), pp.3-4.

allocation of emergency food aid itself to turn out quite costly. As a result, low-income groups often lack substantial assistance by their own governments and have hence become increasingly dependent on external aid programs. At least in the very short and short run will the financial and humanitarian assistance of NGOs and institutions like the World Bank or the WFP be indispensable to weather the crisis. Many Third World countries will "need compensatory financing to respond [not only] to the food price spike"[86] but also to cushion the adverse effects caused by increased import bills of crude oil. Should the International Monetary Fund (IMF) follow the recommendations issued by the WFP, officials may consider granting more financial resources in conjunction with the Compensatory Financing Facility (CFF). Focus shall hereby be laid in particular on those 30 developing countries which risk suffering most from the twofold burden of being a net-importer of both food and oil. [87]

Besides, it is worth mentioning that despite the largest repercussions of risen food prices to be felt in low-income countries, donating nations as well do have to face certain challenges. Considering the increased resource costs, donors will consequently be asked to contribute at least an additional $500 million in order to meet the WFP's food aid budget for the year 2008.[88] Moreover, analysts at the Overseas Development Institute state that a higher level of coordination across the various UN departments could yet be achieved. At the current stage, intra-agency management still demonstrates a certain sub-optimality when it comes to a synchronized approach between the various relieve programs - then again, this recommendation may be equally relevant for inter-institutional assistance, including co-operations between international aid organizations and local authorities of the countries in need.[89]

Past experience has shown that in many developing regions only the combination of well organized government interventions and the technical assistance

[86] odi (2008), p.4.
[87] Afghanistan; Angola; Benin; Burundi; Chad; DRC; Eritrea; Ethiopia; Gambia; Guinea; Guinea-Bissau; Haiti; Kenya; Madagascar; Malawi; Mauritania; Mozambique; Myanmar; Nepal; Niger; OPT; São Tomé and Príncipe; Senegal; Sierra Leone; Somalia; Tajikistan; Timor-Leste; Yemen; Zambia and Zimbabwe. See odi (2008), p.4.
[88] See loc. cit., p.3.
[89] See loc. cit., p.4.

by international institutions such as the WFP, FAO or IFAD, may potentially be able to successfully implement local systems of social protection. In the medium and long run the latter would then turn out significantly more cost efficient than input subsidies of single food products ever could – a condition that implies that eventually the mentioned strategy is likely to result more sustainable than most of the other broad-based action plans that have been discussed so far.[90]

2.2 Short to medium term interventions

While the provision of direct financial and material support is crucial on the very short and short run further measures have to be taken which would secure people's livelihood on a basis beyond emergency interventions. Thus, in the medium run, need arises for renewed attention to production opportunities outside the urban areas. Another significant role in sustaining households' income and basic food supply is therefore also attributed to those policies which are designed "to re-launch agriculture and revitalize rural economies[. In view of soaring commodity prices they may as well comprise initiatives] intended to boost short-term supply response by facilitating smallholder access to essential production inputs"[91], including fertilizers, seeds, and special loans for the micro-farming sector. As FAO analysts point out, the scope for productive improvement in the agricultural sector is substantial. The investment incentives associated with increased food prices will however only be accessible if complemented by fundamental enhancements in long disregarded areas, including agricultural and general infrastructure, research and the development of adequate instruments for risk and credit management. In other words, "[s]upport needs to focus particularly on enabling poor rural producers - those least able to respond to changing market signals - to expand their production and marketed supply."[92]

Then again, a comprehensive strategy would have to take into account both supply and demand side related needs. A recent policy brief issued by the IFPRI in May 2008 subsequently assesses also a number of conceivable response options which would allow for a stabilization of market prices low-income consumers could

[90] See FAO (2008), p.44.
[91] Loc. cit., p.43.
[92] Loc. cit., p.46.

Response strategies by the international community

#	WHAT?
1	Undertake fast-impact food production programs in key areas
2	Eliminate agricultural export bans
3	Expand emergency responses and humanitarian assistance
4	Change biofuel policies
5	Calm markets with market-oriented regulation of speculation, shared public grain stocks, strengthened food import financing, & reliable food aid
6	Invest in social protection
7	Scale up investments for sustained agricultural growth in key areas
8	Complete the WTO Doha Round

#	WHO?
1	Donors, regional organizations, NGOs, & civil society organizations (CSOs)
2	G8+5 and subregional organizations
3	UN, donors (for financing), humanitarian agencies, NGOs, & CSOs
4	OECD countries & others large investors of grain- & oilseed-based biofuels
5	IMF, OECD countries, sub-regional organizations, & commodity exchanges
6	UN, national governments, donors, NGOs, & CSOs
7	Donors, OECD countries, regional organizations, foundations, & private sector in key areas
8	WTO and OECD countries

#	WHERE?
1	Sub-Saharan Africa (SSA) & some selected Asian countries
2	Global impact
3	SSA, Asia, & Central America & the Caribbean
4	Global impact
5	Asia (for rice), Latin America, SSA, North Africa, & the Middle East
6	Asia, Latin America, SSA, North Africa, & the Middle East
7	Asia, Sub-Saharan Africa, & Latin America
8	Global impact

Source: von Braun (2008b), pp.8-11.

support, too. Among the rather prominent strategies may then count the adjustment of biofuel policies to the current food price situation (see #4). As already seen at an earlier stage of discussion, bioenergy and food production have been competing strongly for grain and oilseeds' use over the past few years. Adequate policies could thus regulate the pace of the quickened expansion of biofuel sector in order to control adverse effects of the traditional food industry.

In response to these developments, IFPRI experts propose various response strategies to reduce or at least fix the production of "green fuels" at current levels. A moratorium, i.e. a temporary suspension of the use of oilseeds and grains for the bioenergy sector until food prices would stabilize again at a reasonable value, might hereby prove as an adequate response for OECD countries and other high stake investors in the market. Numerical estimations consequent to such moratorium go as far as to expect a potential 20 and 10 per cent drop of maize and wheat prices respectively. On the long run, however, research should aspire to technologies which would allow for both, "green energy" and a sufficient availability of grains and oilseeds for the food producing industry.[93]

Complementary to the ultimately increasing levels of domestic output, experts strongly advocate the elimination of export bans on agricultural

[93] See von Braun (2008b), p.9.

production (see #2). Should key players such as the G8+5 countries as well as the respective sub-regional organizations subscribe to this strategy – meaning despite their legitimate primary concern for their own citizens – a viable stabilization of the world-wide price fluctuations would be achievable. In the same way, the rural sector could be enabled to considerably increase its production efficiency while grain prices might eventually decrease by up to 30 per cent.[94]

Considering the global impact of this measure as well as the rational disincentive for single countries to engage in such course of action, it becomes clear that a viable solution could only be found through a mutual trust building process where global players would negotiate following a certain code of conduct.[95] Fortunately, several countries have already started to contribute to the overall détente on global food markets. Ukraine for instance, has just augmented its allowed export quantities of wheat, while to this point Thailand's authorities on the other hand have recoiled completely from any restrictions regarding the country' rice exports.[96]

In response to an extensive assessment of the various response options by international organizations and governments, the team of analysts around Joachim von Braun (IFPRI, 2008) also refers in greater details to supporting financial measures for the rural sector. Typically, the latter are sustained by foreign donors, regional organizations and NGOs who would respectively sponsor, administer and supervise the local aid activities. Farmers are thus recommended to participate in so called procurement programs that would guarantee them at least certain minimum prices for their agricultural output produced and sold (see #1). Since the declared aim of such policies is to stimulate the domestic economy's performance as well as to render it more competitive, institutional interventions should be kept minimal, implying that the mentioned price floors would ultimately be based on the long-term price trends of international commodity markets.

[94] See von Braun (2008b), p.8.
[95] See loc. cit.
[96] See FAO (2008), p.45.

In view of to the fairly high risk of price distortions[97] it becomes clear that subsidizing measures "should be focused on and limited to least-developed countries"[98] where the economic urgency would justify such extensive involvement of the state (Sub-Saharan Africa, Central America and the Caribbean). Moreover, IFPRI officials signal that in case a low-development country should adhere to subsidizing programs (as for instance of seeds, irrigation, fertilizers, and electricity to support production of the upcoming season), authorities are advised to actively implicate private sector participants, too. For only their integral involvement right from the beginning of all economy-boosting measures would then allow for an eased transition at a later date, passing from the original social-impact schemes to sustainable market-based projects.[99]

2.3 Long term impact assistance and the help for self-help

Clearly, the list of short and medium run response options which are conceivable by the various governments and international aid organizations could be further extended. For strategies and specific policy adjustments would typically vary considerably between countries and single regions. What most of the hardest hit developing economies have in common though is their incentive to improve agricultural production as well as to reduce the potentially adverse effects caused by a high dependency on international market volatility (mainly referring to the global food and commodity price inflation). The unanimous recommendation of economic experts and supra-national organizations and research centers such as the United Nations, the World Bank or the Overseas Development Institute states that integral reforms of the rural sector will be necessary in the future. Higher investments and supporting policies which would stimulate production as well as consumption incentives are accredited to be crucial for the implementation of a sustainable solution.[100] In absence of the respective measures the roughly 450 million small stake farmers world-wide would most likely forgo the economic potential that is equally associated with higher food prices.[101]

[97] See Rahman et al (2008), p.12.
[98] von Braun (2008b), p.8.
[99] See loc. cit., pp.8-9.
[100] See World Bank (2008a), p.7; see also WFP (2008), p.2.
[101] See IFAD (2008a), p.2.

Besides the necessary enhancement in asset availability as well as the substantial improvement of physical infrastructure in most Third World countries, the ADB equally stresses on the importance of reforms in the financial sector. "[F]inancial institutions, including microfinance institutions, need to expand operations rapidly [in order] to improve access of farmers and rural poor to credit."[102] Evidently, the same recommendation may apply to the urban poor, who derive at best a minimal share of their livelihood from agricultural production, but for most parts are generating their income rather through "micro-retail" or employment.[103] In those cases which occur on a most frequent basis in low-income countries, the eased access to financial resources and services, i.e. via micro-loans etc., may allow beneficiaries to render their businesses more productive, for instance when employing the credit as working capital. "[Giving a more feasible] example, clients can buy rice or grains in bulk at wholesale prices and resell it at retail prices or buy a refrigerator to keep [their stocks] fresh."[104]

What may be intuited already at this early stage of discussion about "informal-sector-financing" is, that on the medium and long run, those businesses are given the chance to become more sustainable – a circumstance which may eventually translate into a higher level of economic security for the micro-entrepreneurs themselves. The combination of a high target group precision, a relatively simple implementation and the immediate impact on beneficiaries subsequently appears to qualify microfinance as a viable supplement to the beforehand discussed policy options – and the focus of discussion from here on.

[102] Rahman et al (2008), p.13.
[103] See Dessus/Herrera/de Hoyos (2008), p.2.
[104] United Nations (2001b), p.13.

3 Microfinance and its potential of economic empowerment

As ultimately a country's long term market stability is acutely dependent on the production and spending decisions of its citizens, the second chapter of this paper will primarily focus on private households' rather than institutions' action strategies. Even more precisely, the emphasis is laid on the use of microfinance as a prospective source of private and entrepreneurial income support, assessing its potential to empower the respective beneficiaries. In this context, the discussion will thus raise questions as to what extent microfinance may be able to generate a higher level of individuals' auto-sustainability as well as to improve clients' capacity to weather such strong inflationary tendencies as have been seen globally over the past 12 to 18 months.

On the other side, the analysis also seeks to answer, whether and how the high price scenario on international commodity markets might *(have)* adversely affect*(ed)* both the demand and consequently the supply side of the microfinance sector. As strategies and policy approaches tend to vary noticeably between countries, regions and institutions, a comprehensive analysis with global outreach would be hardly possible in the present format of this paper. Thus, for the sake of structure and transparency the discussion will gradually focus on a single market - proceeding from a more general picture of the African history of microfinance to the evaluation of the sector's prospects and challenges in Mozambique. Moreover, the analysis will be accompanied by a major case study of one of the oldest institutions in the country, namely AfricaWorks, which will serve as a sample and thus the initial base of comparison to all other microfinance institutions (MFIs) in the region.

3.1 Historical background

The concept of offering financial services to those parts of the population which traditionally have no access to the conventional banking is all but new. And it may therefore make sense to clarify some termini first, including the differentiation between the concept of "microcredit" and the recently more and more employed term of "microfinance.

3.1.1 The early starts of microcredit

Contrary to the widespread idea among microfinance activists, the original model of microcredit closest to today's concepts[105] (see definitions beneath) was not invented 30 years ago in Bangladesh, but rather a necessary by-product of the European economic development in the early 18th century. Thus, the very first "larger-scale" micro-loan movement was initiated in Ireland in the 1720s as a response to the appalling surge in poverty the continent had been suffering from for more than a century. Much of the pioneer work was done in the small island state, including a substantial trial and error phase. In consequent years, the Irish Loan Funds which emerged from those early attempts became famous for their outreach and success. It is worth mentioning at this point that the latter (i.e. the success) only set in after a long period of merely gradual growth which was only later followed by the transformation from informal to formal institutions. Then however, and although proceeding quite slowly, the shift in Europe's financial sector occurred and the Irish model found numerous imitations throughout its neighboring states.[106]

At the beginning European microcredit consisted mainly of small-scale, informal initiatives, including informal saving clubs like the English "box clubs", or in Germany the community-based saving funds and rural "savings & credit cooperatives" – today better known as "Sparkasse" and "Raiffeisenbanken". Surprisingly enough, the successors of the early MFIs still prevail in recent days, and in Germany even represent the very bases of the whole country's financial system. Resuming, it can be said that basically all of today's developed countries have their proper, individual history of microfinance – one that allowed the original

[105] **Microcredit (MC)**: *Microcredit is a small amount of money loaned to a client by a bank or other institution.* United Nations (2005).

Microfinance (MF) *on the other hand is a more comprehensive concept, with microcredits only representing part of the whole range of offered services (i.e. housing loans, insurances, savings instruments, transfer services, etc.). The term "microfinance" thus refers to the sector of informal financing as a whole, implying an increasing sophistication of the offered services*.

See United Nations (2005).

Microfinance Institutions (MFIs) *which encompass a wide range of providers that vary in legal structure, mission, and methodology—offer these financial services to clients who do not have access to mainstream banks or other formal financial service providers.*

Lafourcade (2005), p.2.

[106] See Seibel (2003), p.10.

form of financing the informal sector to grow into a formal, sustainable structure which is protected and enforced by a suitable legal framework.[107] Reviewed in a larger perspective, this implies that the early microfinance institutions were instrumental in securing the basis for further economic potential as well as the sustainable growth in the majority of today's industrialized nations.

3.1.2 The modern revival of microfinance

Over the last three decades, one of the most significant contributions to raise hope in terms of poverty alleviation has been made by the modern movement of microfinance. Unlike the standardized strategies of conventional credit institutions, the grass root approach of "banking the un-bankable" features an exceptionally close relationship between the financing institution and its clients. Amongst the numerous definitions given, the Asian Development Bank finds the following, rather comprehensive description:

> *"['M]icrofinance' is the provision of a broad range of financial services such as deposits, loans, payment services, money transfers, and insurance to poor and low-income households and their microenterprises."*[108]

As numerous positive case studies demonstrate MF recipients hence tend to benefit from an improved economic activity and/or financial security. In other words, the progressive model has been able to lay the basis for individual and sustainable economic growth even in the poorest and most disadvantaged regions of the Third World. UN official conclude that "[w]hen properly harnessed and supported, microfinance can scale-up beyond the micro-level as a sustainable part of the process of economic empowerment by which the poor can lift themselves from poverty."[109]

Although not all together new[110], the idea of banking the poor has recently attracted much attention and impetus thanks to the 2006 Nobel Prize laureate Mohammed Yunus. The Bangladeshi professor of rural economics was awarded jointly with the Grameen Bank which he founded in 1976, for his dedication to MF

[107] See Seibel (2003), pp.3-4.
[108] Boúúaert (2008) p.10.
[109] United Nations (2001b), p.4.
[110] See Seibel (2003), pp.3-4.

and its impact on poverty alleviation. Serving as a worldwide role model for sustainable development work, the institution offers access to financial resources to the worlds poorest who have largely been neglected by the conventional banking system.[111] As Raimar Dieckmann underlines in a research paper effectuated for the Deutsche Bank in 2007, microfinance is based on conceding to the working poor the capability of acting entrepreneurially and by this, as a matter of principles, being creditworthy. Typically, beneficiaries are granted financing which amounts to the local equivalent of even less than USD 100 when applying for the first time. The credit size may, however, be raised considerably with the number of effectuated loan cycles - even up to a multiple of the initial value in case of trustworthy clients.[112]

Over the past thirty years a wide range of possible contractual structures has been developed, for the movement of modern microfinance has gone through considerable changes when speaking of market volume, the number of participants and the range of products served. Current studies estimate more than 10,000 different microfinance institutions (MFIs) worldwide - a figure which does but reflect the prevailing absence of market standardization as individual organizations tend to vary conceivably in terms of their size and funding, the respective legal form as well as the policy approach chosen in a particular region.[113] While the number of clients and available financial vehicles has witnessed a not less dynamic growth, their precise figures may differ noticeably. For until now no general consensus has been reached as to *which type of institution and methodology should be considered when counting customers*. Following the data analyzed by the Consultative Group to Assist the Poor (CGAP), one finds results ranging from 133 up to 190 million borrowers, depending on the source consulted.[114] What remains however beyond doubt among experts is the persistence of a vast range of opportunities that have not nearly been exploited yet, as "the microfinance industry is still unable to meet more than a fraction of today's potential borrowers' demand."[115]

[111] See Grameen Bank (2008).
[112] See Dieckmann (2007), p.4.
[113] See loc. cit., p.5.
[114] See CGAP (2008).
[115] Dieckmann (2007), p.10.

3.2 Microfinance in three questions: Who? What? Where?

3.2.1 Who are the actors on the demand and supply side?

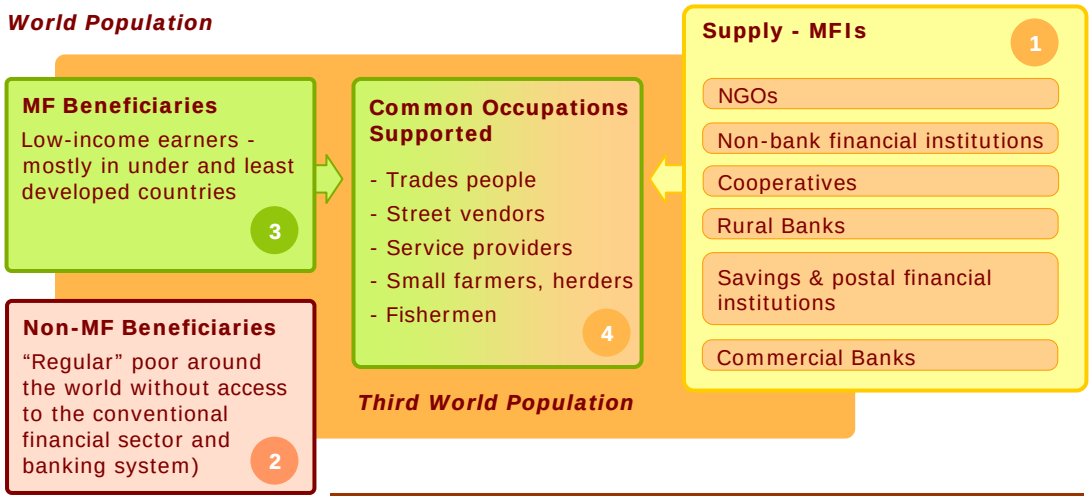
With roughly 2.7 billion people (i.e. around 40 per cent) of today's world population living on less than USD 2 a day, it becomes clear that the informal sector's demand for accessing alternative financial resources is not even close to being covered by the current offer.[116] And while supply side structures are becoming increasingly diversified **(1)**, the microfinance market remains significantly below its potential performance. Hence, even if allowing for a generous count regarding the number of borrowers – implying 190 million rather than 130 million beneficiaries as the basis of comparison – only seven to eight per cent of the prospective demand is currently being served by MFIs (2) & (3).[117] The vast majority however and thus more than 90 per cent of the Third World's poorest inhabitants, still relies heavily on foreign financial and humanitarian support. Subsequently, economic growth as well as basic auto-sustainability often remains severely limited in the respective regions. Considering the circumstances this statement implies that both national administrations and individual households tend to feature a substantial lack of independence from their benefactors. For investment policies and consumption decisions might eventually be conditioned by the respective foreign aid program.[118]

On the other hand, those low-income earners who are able to receive micro-loans might find a broad variety of conceivable applications for the additional resources, eventually allowing for a higher level of economic security. Consequently, over time the various institutions have extended the range of services considerably in order to meet their clients' needs (housing, education, etc.). Nevertheless, the vast majority of individuals who would solicit small-scale loans uses the increased liquidity for merely entrepreneurial purposes. More precisely, the largest fraction of the working poor operates as self-employed trades people, street vendors and service providers (as for instance in the field of handicrafts, when working as a carpenter, smith or else wise). Depending on the region and primarily on whether one is speaking of urban or rural areas, MF beneficiaries might also

[116] See Dieckmann (2007), p.3.
[117] See loc. cit., p.3.
[118] See Maponga/Mastaki Namegabe/Mutangadura (2007), p.5.

pursue occupations such as small scale farming, herding or fishing **(4)**.[119] It is thus plausible to assume that living conditions and working habits of the many MFIs' clients and prospective customers are diverging to a considerable extent. In order to address the resulting financial needs - presumably of an equally heterogeneous nature – most microfinance operators have subsequently adapted their range of specialized products and services to the local requirements.

Fig. 10 Demand and supply side in the context of microfinance



Source: based on Dieckmann (2007), p.3.

3.2.2 What services do MFIs most commonly offer?

Facing the large variety of institutions offering pro-poor banking services microfinance qualifies as an "umbrella concept" rather than a precise description of its content.[120] Regional peculiarities, different policy approaches and consequently diverging target groups of microfinance clients have let the list of financial services grow long. And while early MF projects would in most instances have imitated the Grameen Bank, today's MFIs have clearly sophisticated their repertoire. Consequently to the high level of product innovation and individualization, a comprehensive listing

[119] See Dieckmann (2007), p.3.
also: "*Microfinance [is in most cases] provided to people who farm or fish or herd; who operate small enterprises or microenterprises where goods are produced, recycles, repaired, or sold; who provide services; who work for wages or commissions; who gain income form renting out small amounts of land, vehicles, draft animals, or machinery and tools; and to other individuals and groups at the same local levels of developing countries, both rural and urban.*"
Robinson (2001), p.9.

[120] See Dieckmann (2007), p.3.

of all existing instruments would be virtually impossible. The beneath depicted compilation of services – while representing but a narrow selection – is however able to give at least a first impression of the most commonly offered products in microfinance (a larger version of the table is to be found in the Annex 4).[121]

Fig. 11 MF instruments

- **Micro loans**
  - Group based instruments
  - Individual loans
- **Micro savings**
- **Micro leasing**
- **Micro insurance**

For details refer to Annex 4.

While microsavings and microcredits allow beneficiaries to benefit from consumption-smoothing, financial backup in cases of emergencies as well as the self-provided or external financing of investments, microinsurances allow for an adequate risk management, loan protection and the client's social security.[122] Having said this it becomes clear that "[m]icrofinance initiatives can play an effective role in addressing material poverty, the physical deprivation of goods, services, and the income to attain them".[123] On the long run MF beneficiaries are thus likely to be better equipped to weather acute market tensions and price hikes than non-receiving members of the poorest social layers.

3.2.3 Where do microfinance operators work?

Since its beginnings, modern microfinance seemed to have favored Asian and Latin American regions, where focusing its core activities mainly upon countries such as India, Bangladesh, Bolivia and Peru. More recent market developments however, reveal an increasing involvement of MFIs on the African continent.[124] Based on a survey issued by the Deutsche Bank Research Team in 2007 one finds that, despite the fact that only 10 per cent out of the 76.9 million borrowers sampled in the study are residing in SSA, already nearly a quarter (i.e. ~ 23 per cent) of the 2,207 examined MFIs has settled for the African regions rather than Latin America or Asia.[125] Relativizing the assessment of still prevailing reports which state lower levels of the return on assets in SSA, it might therefore result more adequate to speak of a potential yet to exploit rather than a chronic underperformance of the local African sector. In

[121] See No author (2008a); see also ACCIÓN (2008); see also Dieckmann (2007), p.4.
[122] See IFAD (2001), p.4.
[123] United Nations (2001b), p.13.
[124] See Boúúaert (2008), p.8.
[125] See Dieckmann (2007), pp.4 -5.

other words, should one consider global indicators for profitability and efficiency as the underlying basis for comparison, SSA MFIs - at the current state of development – may still rank behind comparable operators in other Third World countries.[126] Eventually, they seem however to be catching up. Thus, market dynamics have shown a fast expansion of both offered services and demand, resulting in the African MFIs to figure among the highest ranking ones in terms of productivity (base of measurement: number of savers and borrowers per staff member).

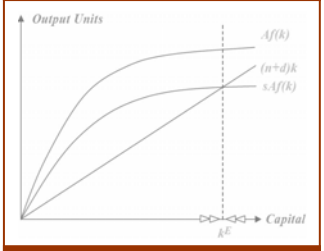
At this stage, Sub-Saharan MFIs already represent an important minority among the market's key players. Even more, economic outlooks also let to believe that this role will further expand as the African MF sector is well positioned to answer the demand of millions of prospective customers in the future – customers who are yet hampered in their capability of accessing regular financial services[127]. Even regions that have displayed a substantial economic delay over the past decades tend to acknowledge microfinance as a viable facilitator for poverty reduction. All in all, the given picture suggests that it is safe to conclude that MF – due to its operative and geographic adaptability as well as the straightforwardness of its proceeding - may qualify as a viable response option, equally on international, country and household level.

3.3 Microfinance in the Sub-Saharan African context

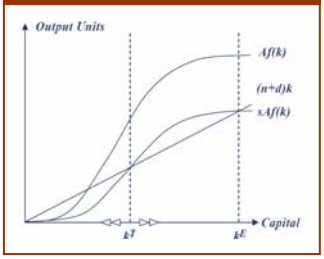
3.3.1 Poverty Trap and the Big Push

For over thirty years economic growth and humanitarian advancement in Sub-Saharan Africa have lagged behind most other developing regions. In many cases the expectations and hopes which were associated with the continuously large contributions by foreign governments and aid organizations have not even remotely been met.[128] One explanation scholars offer to the phenomenon identifies the amount of aid attributed

Original Growth Model



Poverty Trap Model



Further details see Annex 5.

[126] *using the return on assets and the costs per borrower respectively as the basis of comparison*
[127] Lafourcade (2005), p.1.
[128] See United Nations (2001b), p.1.

as being insufficient. Thus, in order to initiate a *big push*[129] and lift a country out of the *poverty trap*[130] only a comprehensive, large-scale and targeted investment program would be likely to allow for a noticeable difference in terms of sustainable growth.[131] Suffices to say that the answer to the question of "How to boost a whole continent's economy?" would then represent an even more complex challenge to which no adequate answer seems to have been found yet.

3.3.2 Inefficiencies in aid distribution

Moreover, analysts and researchers have been observing another fundamental obstacle in the well-functioning of relieve programs. At numerous occasions the distribution of financial and material aid is simply being diverged from its original destination, resulting in only a fraction of the initial volumes (of food aid, clothing, financial support, etc.) being forwarded to the actually intended recipients, i.e. the most disfavored social layers.[132] Lately however, the ongoing efforts of an ever growing number of African MFIs were able to raise hopes and set a new course for the continent's future.[133] For more than many other aid models on the institutional level does MF represent a hands-on, direct approach which circumvents potentially corrupt intermediaries and forwards financial resources directly into the hands of the actual target group. Hence, for most parts experts confirm the economic potential of promoting the "help for self-help" - yet also indicating that "African microfinance is as diverse as the continent itself"[134] and thus no panacea for under-development and chronic poverty. Questions arise whether under severe price pressure such as witnessed in 2008 the proclaimed efficiency of MF operations can be sustainable in the region.

3.3.3 Direct support: bypassing dispensable intermediaries via microfinance

As already seen earlier, the variety of institutions offering "financial services to low-income clients [is large and ranges from] non-governmental organizations (NGOs), non-bank financial institutions, cooperatives, [and] rural banks, [to]

[129] **Big Push**: "take-off threshold" to boost economic development with a large-scale investment; see Sachs/ Bahadur/Faye/Kruk/McArthur/ McCord/Schmidt-Traub (2004), p.224.
[130] **Poverty Trap**: see Annex 5.
[131] See Sachs/ Bahadur/Faye/Kruk/McArthur/ McCord/Schmidt-Traub (2004), p.145.
[132] See Maponga/Mastaki Namegabe/Mutangadura (2007), p.9.
[133] Basu/Blavy/Yulek (2004), pp.6-7.
[134] United Nations (2001b), p.2.

savings and postal financial institutions, [as well as] an increasing number of commercial banks."[135] Unlike other developing regions such as Latin America and Asia, SSA displays however a vast majority of institutions that would promote saving instruments rather than loans products as their core services. The hereby gathered financial resources consequently serve as a critical source for the later redistribution of the administered funds. In other words the above-average proportion of savings functions like a strategic safety net which would ultimately secure and re-finance the institutions' lending services. The average default risk hereby amounts to only 4.0 per cent over a 30 days period. As a consequence, African MFIs often feature a superior portfolio quality than reported in other developing regions.[136]

Despite those promising results, the African MF sector and its participants still face however a number of un-surmounted challenges. Innovations and technological advancements, both, the individualization and refinement of existing products as well as the creation of new financial services are necessary in order to adequately support the informal markets in Southern, Western and Eastern Africa. The continuing efforts, designed to strengthen the capacity of local MFIs are hereby crucial for the reduction of costs, the improvement of profitability levels and the increase in outreach. For only should those conditions be fulfilled could MFIs achieve their long term goal of auto-sustainability.[137]

At this point not secure prediction about the sector's development can be made; it seems however that the underlying structures of the African MF sector might work advantageously for the market's stability. In order to support this supposition the discussion is about to take a more practical approach and base its reasoning on the actual field reports of a selection of MFIs operating in Southern Africa. More precisely, emphasis is laid on a single country market, for the integral analysis of all sundry forms of African MF would clearly go beyond the scope of this paper. At the example of Mozambique the topic shall be rendered more accessible to the reader – with the proclaimed goal of providing the latter with a better understanding of the actual strategic and operative framework employed by today's microfinance practitioners.

[135] Lafourcade (2005), p.1.
[136] See loc. cit.
[137] See loc. cit.

4 Focus: Mozambique

As a former European colony, in this case of Portugal, Mozambique which is geographically adjacent to countries like South Africa, Malawi or Zambia, displays a relatively agitated past. Severe inner political disturbances arose in the aftermath of the country's independence in 1975, ultimately leading to an extended civil war which allowed the young nation come to rest but in the early 1990's. Since 1993 however, Mozambique's political situation has been stabilized and its economy has demonstrated an above-average growth compared to most other African regions, i.e. approximating the 8 per cent annually (between 2000 and 2006). In view of these developments the country has become one of the continent's most outstanding examples for a successful post conflict management and economic reconstruction. The acceleration of economic development "was driven mainly by booming investment in mineral resources, industry, services, and agro-industry, as well as by the good performance of the construction sector as a result of donor-financed infrastructure projects."[138] Following further prudent policy adjustments experts predict an average 6.9 per cent growth for 2008 and 2009.[139]

4.1 Reconstructing a country: a growing economy – a growing MF sector

At around the same time the civil war ended, a number of new and promising business opportunities emerged, including the very first forms of microfinance in Mozambique. Among the earliest, pioneering projects which attempted to install alternatives to the conventional banking system would then figure the Urban Enterprise Credit Fund and the in 1992 initiated credit and training program by the Gesellschaft für Technische Zusammenarbeit (GTZ)[140]. While the first initiative used to offer small-scale loans to a number for mainly urban businesses (i.e. carpenters, beauty salons, restaurants, etc.), the GTZ program was specifically designed to support the nearly 18,000 national contract workers who were returning to Mozambique after the German re-unification in 1989. Henceforth, "non-bank" credits and training were made available to micro-entrepreneurs in Beira and the Maputo Metropolitan Area (MMA) under the wing of a program which would

[138] OECD – AfDB (2008), p.461.
[139] See loc. cit.
[140] Translation: Association for Technical Cooperation.

eventually grow to become a country-wide operating commercial bank, nowadays better known as SOCREMO (Sociedade de Gastao e Financiamento para a Promocao de Pequenas Projectos de Investimentos).[141] Six years later, i.e. in 1998, "SOCREMO was the first microfinance programme to become a registered financial institution, with the Government of Mozambique owning 94% of its shares."[142]

In 1993, another ambitious project was launched in Gaza and Chokwe Provinces. When World Relief, a globally operating Church-based NGO, proclaimed its plans to institute "village banks" to support poor women working in the area's numerous markets, the concept was considered highly unconventional. And for many later practitioners the initiative still marks the first authentic microfinance scheme in Mozambique. Due to the promising results (e.g. repayment rates nearing 100 per cent) the program – also known as Fundo de Crédito Comunitário (FCC)[143] - was able to attract a number of influential government representatives and thereby facilitated the lasting support of MF by the local institutional framework. As a consequence, numerous similar projects followed, including the CRESCE program (Crédito Sustentável para o Crescimento de Empresários)[144] initiated by CARE International in 1995 or various pick-up operations by World Vision in the Tete, Nampula and Zambézia Provinces at around the same time.[145]

Contrary to what one might expect, MF operations in Mozambique "did not immediately target the more accessible and concentrated market[s in and around the capital]" (with an estimated number of market traders and consequently potential MF clients of roughly 70-80,000). Only later would local practitioners focus on the country's loadstone. The main reason for this development can probably be attributed to the fact that in its early years the MF sector in Mozambique, with the exception of the above mentioned GTZ-promoted program in Beira and Maputo, was largely driven by small but experienced, principally rural NGOs with an international background. At the time, they were typically introducing the informal banking model

[141] See de Vletter, (2006), p.3.
Translation (SOCREMO): Management and Financial Group for the Promotion of Small Investment Projects.
[142] de Vletter, (2006), p.3.
[143] Translation: Collective Loan Fund.
[144] Translation: Sustainable Credit for the Entrepreneurial Growth.
[145] See de Vletter, (2006), pp.3-4.

only as a minor part of the various components which used to constitute their integrated development and aid work. The first project concentrating exclusively on MF was then a Swiss funded co-operation between two local institutions[146] which later merged and became know as Tchuma (starting in 1995-96). By the end of the first decade, i.e. in the year 2000, the number of MFIs in Mozambique had grown considerably, even leading to the classification into more precise, institutionalized categories. As a sample of this newly indexed genre of funding institutions NovoBanco, an initiative associated to the global network of ProCredit, then started in form of a "microbanco", reflecting the improved coordination between MF practitioners and the local authorities.[147]

4.2 Structural transformations

Besides the progress in terms of legal and infrastructural framework another development has decisively shaped the Mozambican MF sector. While the first wave of institutions was mainly operating under the managerial wing of foreign organizations – often benefiting from the transfer of knowledge just as much as suffering from a substantial lack of self-determination - in a second step a number of albeit smaller but therefore national NGOs entered the market, grew stronger and started serving a rising number of clients. Naturally, not all of them have survived and as prospects of sustainability tend to vary among those operators "[s]ome debate has arisen regarding the appropriate level of [foreign] technical assistance to be offered"[148] relative to the institution's eventual performance. Consequently, another rather new development could result quite advantageous for the remaining group of small-scale operators; in recent years the demand to outsource certain management services has increased among a number of international aid organizations leading to more and more local MFIs being contracted instead. Subsequently, the additionally generated income might secure the standing of "light-weighted", domestic MF operators in the market.[149]

[146] namely the Fundo de Desenvolvimento Communitário (FDC) and the Banco Internacional de Moçambique (BIM).

[147] Four categories of MF provision: A = "micro bank" (entitled to receive deposits from clients) / B = local savings and credit organizations (particularly credit operators) ➡ A & B are labeled proper MFIs and are required to undergo prudential supervision / C & D = microfinance *operators* (condition: registration with the Banc of Mozambique & operational monitoring).
See de Vletter, (2006), p.6.

[148] Loc. cit., p.5.

[149] See loc. cit., p.55.

Facing the heterogeneous nature of the market, the results and conclusions to be drawn with respect to the various institutions' future remain however miscellaneous. Thus, should anything be deduced at this stage of the analysis, then that over the past couple of years the turnover rate of operating MFIs has been relatively high in Mozambique. As former studies indicate not only the *number* of national and/or smaller NGO hosted MF projects has been shifting considerably, but also the *type* of institutions operating in the Mozambican market. Between 1997 and 2005 shares between international and local NGOs dropped from nearly two thirds to under 25 per cent and increased from less then a quarter to 42 per cent respectively. In other words, the number and dominance of national organizations is growing while more and more foreign operators are retiring from the local scene. Moreover, the MF sector in Mozambique is displaying a continuously rising level of commercialization which would lead one to expect the emergence of more large-scale financial operators. "By 2005, the market was dominated by three commercial banks (NovoBanco, SOCREMO, and BOM). [And also] Tchuma, being a cooperative, is considering [the conversion] to a commercial bank."[150]

4.2.1 Sustainability: conditions for an institution's long term survival

In view of global market developments which promote the industry's long term consolidation, the MF sector in Mozambique has thus clearly subscribed to the general trend. While in the original concept MFIs may have been conceived mostly as non-profit enterprises which would draw funds mainly from grants, donations and subsidies, today's operators face an increasingly formal, regulated business-environment. Standards have risen in terms of financial autonomy, and often imply that an institution's economic sustainability has to be guaranteed by its own operative success.[151] Giving an example, the three institutions mentioned before (SOCREMO, BOM and NovoBanco) have already mastered most of the challenges in the process of securing their market position and their businesses' long term survival. In consequence to the transformation into commercial banks, the institutions' key indicators which quantify their operations' performance reflect a firm basement when measured for instance in terms of outreach and branch network,

[150] de Vletter, (2006), p.15.
[151] See Dieckmann (2007), pp.5-6.

the threshold number of clients or the minimum capital requirement.[152],[153] In the end, the achievement of those performance indicators will not be of lesser relevance for the gradually rising number of smaller local MFIs neither as eventually overall transaction costs will have to be lowered in order to secure the operational sustainability. In other words, sound repayment rates, justifiable cost ceilings and a sufficiently high loan volume in circulation are becoming equally imperative for small-scale projects as for the mentioned cases of the above larger operators. Otherwise, the covering of expenses could result difficult and as a worst case scenario might even impede the respective institution to secure its long term standing in the market.[154]

While the ongoing process of sector transformation (i.e. an increasing level of regulation and competition as seen above) demands MFIs to review their financial resource flow other, rather recent market developments are likely to induce similar effects. As already discussed thoroughly in the first part of the paper, during the months of July and August of 2008 the world economy has witnessed all time highs of commodity prices. Among the complex set of economic and social consequences which may be implicated at this point, those price hikes have also caused international relieve programs to become noticeably more cost-intensive.[155] Some might even be abandoned in order to answer more urgent requests and thus entail the risk of financial grants and donations to be reduced, see even withdrawn completely. While aid flows seem to commonly feature a certain degree of unpredictability[156], various projects in the Third World, including a number of NGOs and small MFIs might see the end of their activities loom as their financial pool dries out.

4.2.2 Incentives to foster donor-independent, autonomous funding

In absence of more extensive empirical data assessing the interaction between the recent commodity price inflation and the ensuing risks for the MF sector it seems appropriate at this point to briefly examine the closest comparable situation where MFIs experienced a severe disruption of their operations and cash flow and draw some preliminary conclusions analogically.

[152] See TheMIXmarket (2008a); see TheMIXmarket (2008c); see TheMIXmarket (2008d); see also de Vletter, (2006), p.5.
[153] See Coompson/Karuri/Pitamber/Sambe (2003), p.5.
[154] See IFAD (2001), p.4.
[155] See IFAD (2008b).
[156] See UNECA (2008), p.15.

In February 2000 large parts of Mozambique suffered a disastrous inundation consequent to a ravaging cyclone during the first days of the month. The situation was even aggravated as a result to the opening of Zimbabwean and Sough African flood-gates, causing the largest river in the country, the Limpopo, to rise quickly – and unexpectedly. Residents had only a couple of hours to seek shelter for, "[t]he flooded area [- as quoted in later reports - was] equaling the size of Belgium."[157] The physical destructions were severe and only by mid April 2000 could traders resume their work on the local markets. Moreover, farming was rendered impossible for an even considerably longer period and in sum, nearly 48 per cent of the locally operating MFIs' clients suffered extensive losses (both personal and commercial), causing acute repayment gaps in the institutions' outstanding loan portfolios.[158]

Surely, 2008's price hikes of food and energy commodities might not be comparable in terms of intensity with the devastating flooding itself, nor do all of the associated adverse side effects match (such as the general degradation of infrastructure, impeded transportation, or the loss of legal documents due to the waters). However, both phenomena tend to provoke similar symptoms when it comes to income shortfalls and debt weights for MF beneficiaries. After all, also the risk of a potentially impeded loan recovery and the subsequent decline in interest revenues for the respective MFIs are quite alike. Thus, spoken in general words which would then apply to both cases (i.e. natural or economic disasters) one can conclude that in a scenario where microcredit recipients face serious (and longer term) financial difficulties, even hampering their ability to fulfill repayment liabilities, the actual MFI which is issuing the loan is, as a consequence quite likely to see the potential irregularities of its clients' liquidity translate into its own cash flow. Thus, in spite of the before mentioned lack of current specific data, this study will nonetheless be able to make a projection into the near future and extrapolate what degree of stability may be expected from the local MF sector facing 2008's tense market situation.

In the context of this still relatively cursory analysis it is assumed furthermore that the differentiation between natural of economic calamities is virtually negligible

[157] Nagarajan (2001), p.10.
[158] See loc. cit., p.11.

as the relevant structural impacts on income and financial solvency appear to be fairly similar. Thus, based on past experience following the flooding, "MFIs and their clients [could be qualified as] vulnerable but [...] capable of coping with disasters […] through several financial and non-financial mechanisms."[159]

In the aftermath of the inundations, MFIs whose clients had been adversely affected then tended to test alternative MF instruments, including micro insurance, remittance services, voluntary deposits as well as services of business advisory and micro leasing. Due to the emergence level and outreach of the inundations a number of MFIs also resorted to mostly donor-funded cash grants which had not to be repaid by their clients.[160] Clearly this measure represents above all NGO-activities rather than an actual business response and does therefore qualify but as a short run relief strategy. Even more, without external funding the respective MFIs would most likely not have been able to offer those grants to begin with. Thus, while this scenario does certainly not represent the general case, it still reflects the necessity of those projects pursuing a continuing commitment in the market to find an alternative, more self-reliant and secure way of financing their operations and weather potential short term losses.

When resuming the sundry examples given so far, it becomes apparent that ultimately former deductions are just equivalent with asserting that MFIs – besides the general market volatility and regulations they are subjected to – are becoming increasingly dependent on the financial capacities of their client portfolio. The increased price levels and potential irregularities in the borrowers' repayment rates emphasize the need for an autonomous, financial stability and up to a certain degree may foster incentives to accelerate the transformation process towards economically viable operations. Thus, in conjunction with an increasing level of commercialization[161], the latest commodity price inflation seems to primarily function like a catalyst. Besides the risk and the in most instances declaredly adverse effects of higher food and commodity prices one might then even see the chance in promoting a new catchphrase in the context of development work: "sustainability through entrepreneurial and economical operations' design".

[159] Nagarajan (2001), p.9.
[160] See loc. cit.
[161] See Dieckmann (2007), p.6.

5 AfricaWorks – an extensive Case Study

So far, the paper could mostly deduce general trends and draw extrapolations which were feasible only thanks to a number of earlier reports effectuated by scholars and experts from international organizations and research centers. However, a sound and definite conclusion which would serve as a sweeping statement on the whole MF sector is hardly achievable at this point, for the analysis is still lacking a sufficiently updated and comprehensive set of data. In default of more topical, large-scale records the paper will subsequently resort to a more focused analysis of a single case study. At the example of AfricaWorks (AW), formerly know as Fundo de Crédito Comunitário (FCC) and in this manner one of the oldest MFIs in the Mozambique, the study evaluates the potential impact of commodity price inflation on AW's clients over time, and eventually on the institution itself.

5.1 Methodology

Based on data which have been gathered recently by conducting a deliberately designed survey among local MF beneficiaries[162] the paper is able to give first-hand field impressions and more importantly to generate a profile of the institution's clients. The information provided by the questionnaire is then reviewed following the model of Porter's Diamond which places the customer in relation to his/her operative business environment. The intuitive discrimination into different client groups is then further underlined by the theoretical approach of a more precise clustering which defines the respective characteristics of a specific group of customers. As a result of this methodology the paper is then given the means to generate more specific conclusions which would ultimately allow deducing further forecasts for the country's MF sector as a whole. In other words, AW is being employed as the primary source of data where the institution's medium-term action plan may serve as a base of comparison for other practitioners in Mozambique.

5.2 Profiling a MFI - AfricaWorks

The FCC was founded in 1994 by World Relief as the first post-conflict

[162] On the occasion of sharply increased commodity prices during the first months of 2008, 184 clients of AfricaWorks have been questioned between June and September regarding their perceptions on both their economic situation and the efficiency of the services provided by the MFI.

program of community banking in Mozambique. In spite of the widespread skepticism which was particularly prevalent among a number of local industry leaders the project showed some remarkable results. The early achievements of the project defied the reservations of those market participants who, in view of the unstable economy resulting from almost three decades of civil war, had not ascribed much success to the idea of microfinance. [163] Contrary to the market's expectations the institution successfully managed the challenges of a very restricted availability in human capital as well as of "an extremely difficult physical operating environment in the rural areas where it focused its work."[164] As already mentioned earlier, with repayment rates of nearly 100 per cent this pioneering program of "village banking" was able to attract much positive attention and thereby essentially paved the way for the many MFIs that were to follow its example.[165]

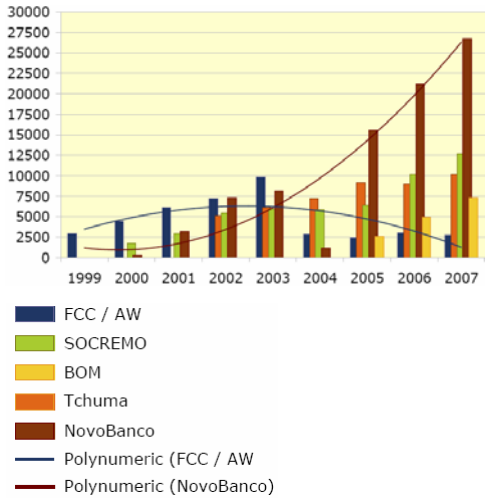
During the disastrous millennium floods which affected large parts of the country a number of the FCC's primary fields of operation, were severely damaged. Both clients and locally active institutions suffered substantial material and financial losses; and while already briefly brought up before, it is worth mentioning that besides personnel and real estate related difficulties the MFI's organizational structure experienced another serious setback caused by the destruction of a considerable amount of sensible data. The full restoration of client records and financial claims which went missing consequent to the floods took months and clearly deteriorated the institutions' cash flow. In addition, a disastrous drought during the two years following the inundations (i.e. between 2001 and 2002) caused the agricultural sector some serious damage, too and in most of the country's rural areas weakened the economic performance. Had the number of borrowers been rising constantly over the previous years, the client portfolio now experienced an abrupt deterioration. It is easily conceivable that part of those developments is to be attributed to the adverse agro-climatic environment – the remaining variables however seem to find a more adequate explanation in the

[163] World Relief functions as a Church-based internationally operating NGO that envisions the provision of comfort to the poor and suffering of the world.
See World Relief (2008).
[164] TheMIXMarket (2008b).
[165] See de Vletter, (2006), pp.3-4.

overall market trends and the rise of a number of new or re-designed MFIs.[166]

While client figures of the former FCC have declined steadily since their climax in 2003, other locally operating institutions such as SOCREMO, Tchuma or NovoBanco / ProCredit have seen their portfolio expand considerably. Over the past five years, AW has continuously lost market shares, declining from close to thirty per cent in 2003 to 10,57 per cent in 2005, in 2006 accounting for only 6,27 per cent before ultimately falling beneath the threshold of five per cent in 2007. Meanwhile, client numbers of NovoBanco have been skyrocketing, and in this fashion allowed the institution to develop and secure its position as the market leader.[167] In other words, the Mozambican MF sector has become more and more competitive over time.

Fig. 12 **MFIs – Number of Borrowers**



For further details refer to Annex 6.

Unlike the other four larger-scale MFIs in Mozambique, AfricaWorks does not offer any official saving accounts as its statue as a NGO has not yet evolved to an accredited banc.[168] The institution's core services subsequently range from a variation of the original village banking, i.e. a community group-lending program, to a rising number of individual loans to microentrepreneurs in urban and peri-urban areas. Since its re-launch in 2007 (transformation from FCC to AW) the scope of operations and strategies has however been expanded decisively due to the development and implementation of a new agribusiness branch which is conceived to function complementarily to the original MF services.[169] Promoting the economic growth and learning of a rising number of microfarmers the institution endeavors at closing the gap between the producing and retailing sector (see Annex 9).

[166] See Nagarajan (2001), pp.10-11.
[167] **First phase** (30/09/1999 – 30/09/2002): increase from 2,931 active borrowers to 9,831 as a maximum;
Turn (30/09/2002 – 30/09/2003): drop from 9,831 to 2,867 active borrowers;
Second phase (30/09/2003 – 30/09/2007): settling between 2,867 to 2,801 active borrowers in 2007;
see TheMIXMarket (2008b); see also Annex 6.
[168] While the loan volume has increased steadily the amount of saving (at AW called "guaranties" has stayed fairly stable over the same time. - see Annex 7.
[169] See World Relief (2007), p.3.

Where currently a considerable share of the country's food consumption is covered by imports the assistance offered to national producers would clearly foster the domestic economy. On the long run MF operations could be re-financed internally (rather than by means of a mainly donor-dependent budgeting) through the creation of real agricultural goods which would eventually enter the retailing sector themselves.[170] Pilot projects to finance crop production and husbandry (in particular chicken breading) have already been initiated in the Mucatine and Massingir district. And while in its initial concept the institution had been envisioned as a mainly donor-funded project, the recent re-design of its policies and strategic approach pictures an operationally more diversified and autonomous financial institution. Through its medium and long term action plan AW explicitly demonstrates its ambition to achieve auto-sustainability. In other words, the institution now promotes a twofold strategy of both poverty alleviation and self-sufficiency, integrating trade and production as complementary elements of an equilibrated economic development. Revenues generated through AW's operations are thus envisioned to internally meet the need for financial resources, which are critical for a sustainable provision of lending capital and the covering of the overall expenses and risks.[171, 172]

5.3 Profiling the clients

In principle, every person living in the extended vicinity of one of the MFI's offices and being involved in a sustainable economic activity may be eligible to the offered loan programs. In the context of microfinance, and thus the original nucleus of operations, the AfricaWorks is currently offering the following four loan services:

- **Grupos Communitário**s - Communitary Groups (C)
- **Grupos Especiais** - Special Groups (E)
- **Grupos Solidários** - Solidarity Groups (S)
- **Individuais** - Individuals (I)

A tabulated overview is given in Annex 8 which offers numerical data on the loan cycles, monetary values and guaranties as well as the respective repayment modalities.

[170] See Annex 9.
[171] See AfricaWorks (2008b), pp.3-5.
[172] A MFI's **self-sufficiency** refers to the "ability to operate at a level of profitability that allows sustained service delivery with minimum or no dependence on donor inputs."
Gibbons/Meehan (2000), p.2.

The ultimately served client however fulfills a slightly more complex set of requirements which typically includes a fundamental level economic know-how and efficiency. The latter is hereby presumed to derive from prior, sound business experience which any borrower is expected to have acquired through the management of his or respectively her own micro, small or medium sized enterprise. Also should the client fit the profile of a respected and trusted member of his/her community, and between 18 and 65 years of age when soliciting the first loan. Before being granted any credit all prospect clients are furthermore required to participate in the respectively scheduled information and training meetings which also serve as a screening test for future participants and group members. [173,174]

Over the past couple of years the repartition of clients over the four principal loan products has not changed much. **C**-clients make roughly for 80 per cent on average, while E-group members count for another 10 per cent. The remaining shares are then more or less equally split between Solidarity Groups (**S**) and Individuals (**I**). Thus, only close to five per cent the client portfolio consists of single entrepreneurs, whereas an overwhelming majority of roughly 95 per cent is operating within the range of the numerous loan groups. At this point it is worth recalling that although the

[173] **Grupo Comunitário (Community Group - C)**: A group of a least 10 members that share a common responsibility and liability for the total amount disbursed to the group; in case of repayment difficulties of a member the rest of the group is asked to cover the resulting shortage. The first loan may hereby range between 1.500 and 4.000 MZM without any collateral given, while in 4 cycles the credit volume can amount up to 20.000 MZM - not exceeding however the double of the respective amount solicited during the preceding loan cycle. The latter is then running between 4 and 6 months with a two-weeks or monthly repayment periodicity.

Grupo Solidário (Solidarity Group - S): Generally, a group consists of 2-4 clients who have demonstrated an impeccable repayment record for at least the 2 previous consecutive cycles. As the loan volume is considerably higher (between 10.000 and 30.000 MZM during the first and 31.000 and 100.000 MZM from the second loan cycles on) clients are asked more financial and material collateral to cover the credit risk. Repayments are monthly and again cover a period between 4 and 6 months.

Grupo Especial (Special Group - E): Groups typically consist of 4-10 clients who display a sound economic performance but lack of the crucial mass in physical collateral to become "Individual" beneficiaries or members of a Solidarity Group where to solicit higher loan volumes than offered in a Community Group.

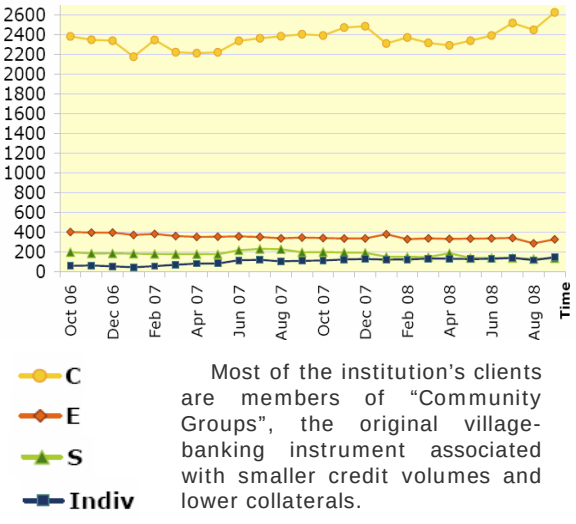
Individuais (Individuals – I): Individual recipients are typically clients transferring from one of the group lending programs, displaying an excellent repayment history over at least the previous 3 cycles. The solicited credit volume may range between 10.000 and 300.000 MZM and is however not more than to double the last or respectively highest granted loan so far.

See "AfricaWorks – Manual das Operações" (June 2008), pp.7-10;
1 USD ≈ 24.99 MZM (when purchasing), or respectively 1USD ≈ 25,18 MZM (when selling);
see also Banco de Moçambique (2009).

[174] See AfricaWorks (2008a), p.7.

individual credit volume solicited by each single member of a group may vary within the given parameters, the responsibility though is shared among the whole group. Should one client fail to fulfill his/her liabilities towards the institution the whole group is compelled to meet the default. Intuitively this internal monitoring effect sets strong incentives to proceed meticulously when choosing fellow associates. Also do social bonds within the group tend to be remarkably strong, thus characteristically implying that group members pursue a rather similar type of business which is often even situated in a common market place.[175] Enlarging this though, it appears thus fairly plausible to deduce a mechanism, inherent to group-lending which fosters the formation of economic clusters on a micro-entrepreneurial scale. In the following section the paper therefore endeavors to discuss the impact of commodity price inflation in the context of cluster theory by examining AW's clients more attentively in relation to their particular business environment.

Fig. 13 **AfricaWorks – Clients per Group**



Most of the institution's clients are members of "Community Groups", the original village-banking instrument associated with smaller credit volumes and lower collaterals.

For further details refer to Annex 10.

5.3.1 Cluster studies in developing countries: adopting Porter's Diamond

Commonly, scholars got accustomed to define clusters "as a group of firms engaged in a particular product market in a particular location."[176] Adjusting this definition to AW the so called *firms* are largely equivalent with the institution's MF smallest entities, i.e. the micro-entrepreneurs, or respectively their micro-enterprises. Analogically, the *particular location* corresponds to the common market place or more generally the case where MF beneficiaries are trading in their fellow group members' vicinity. Along with this concept another theory has been able to attract much attention and at numerous occasions found its way into applied economic research: **Porter's Diamond Model** states that a superior level of competitiveness could be achieved either through cost advantages or product differentiation. Their precise impact would then of course depend on a number of other market-related factors, too (e.g. the stage

[175] See AfricaWorks (2008a), p.7.
[176] Döge/Neven (2000), p.3.

of technologic development, the occurrence of economies of scale, etc.). It becomes noticeable that the original definition of clusters in the above mentioned context appears to be primarily conceived and applied as a tool for studying growth dynamics in developed countries. With industrial clustering being far less common in Third World countries than in highly technologicalized regions growth economists have felt rather discouraged from using Porter's approach in their analysis. Other concepts such as the **Collective Efficiency Model** or the **Flexible Specialization Framework** were labeled more convenient when investigating developing countries' specific growth patterns. After reviewing an extensive discussion on the applicability of the diamond model in the context of development studies, David Neven and Cornelia L. M. Dröge from the Michigan State University conclude that clusters in Third World countries are in fact no exact copies of those in highly industrialized regions. Adapting the larger perspective of the two economists, the two types of clusters do however display sufficiently large similarities in characteristics and evolutionary stages, thus eventually allowing employing Porter's approach, too in both economic environments.[177]

Linking those insights to the results of the latest survey conducted among 184 of AW' clients it is now possible to identify a number of discerning characteristics which allow cataloguing the institution's customers into two primary and several sub-groups. Following the original design of the questionnaire (see Annex 17), the interviewees were at first asked to specify their business activities. As initially a statistically quite significant difference had been expected regarding the coping capacities of retailers (i.e. merely trading market participants), producers (generating market-new goods themselves) and multiply occupied clients (i.e. clients operating as both retailers and producers, or trade at least with various commodity groups simultaneously) a major distinction was originally made between "commerce" **(C)** and "production" **(P)**. When conducting the survey in the field this early intuition did however not prove sustainable.

The evaluated data demonstrate that with multiple business activities per beneficiary being conceivable the number of received answers exceeds that of interviewed borrowers by roughly 20 per cent.[178] Out of the 220 answers given on

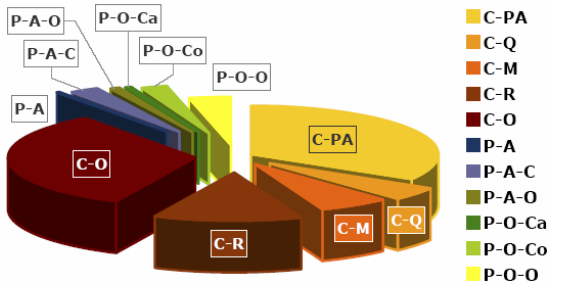
[177] See Döge/Neven (2000), p.7.
[178] Data based on the assessment of the questionnaire conducted between June and September among 184 clients - 220 answers regarding the nature of entrepreneurial activities were given - set of categories **(1)**.

the subject of the clients' entrepreneurial occupations only 10 per cent are related to producing activities while nine tenths of the micro-businesses are associated with trade. Expressed in numbers of borrowers the analysis counted 32 micro-entrepreneurs, i.e. 17.39 per cent of the surveyed clients, who affirm to have orientated their business activities in multiple directions; eight of them engaging in both trade and production, and 24 in trade only – then however dealing with different product groups simultaneously. Intuitively, one might expect entrepreneurs who offer a larger variety of products to withstand price fluctuations better than single-good businesses. When asked about the impact of inflation on their microenterprises the three groups of interviewees would however not deviate significantly in their answers. Eventually, these results suggest that statistically no noteworthy difference exists between single- and multi-product businesses, or between producing and trading MF beneficiaries. Other criteria which would allow identifying client groups seem therefore necessary and a further distinction regarding the nature of businesses pursued may result more adequate.

5.3.2 Client groups – a numerical evaluation

In view of the nature of the recorded business activities the paper does hence not simply use the catalogue of business occupations originally proposed by the questionnaire which was above all distinguishing between **Commerce** and **Production** (see (1)). The evaluation of data would have certainly been more comfortable, as the numerical results were directly given in the survey and thus easier to extract – the instructive value would however have remained fairly limited as could been seen just above. Numerically this postulation is based upon the roughly 38 per cent of all responses matching the fairly unspecified categories "Commerce/Trade - **Other**" (**C-O**), "Alimentary Production - Other" (**P-A-O**) and "Handicrafts - **Other**" (**P-O-O**).[179]

Fig. 14 **Repartition of business foci**

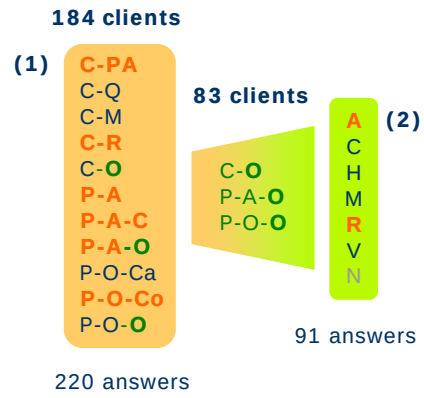


[179] **(1)** under **"C"** (Commerce & Trade ≈ Retails): **C-PA** (alimentary products), **C-Q** (small store), **C-M** (small supermarket), **C-R** (clothing), **C-O** (other); under "**P**" (Production): **P-A** (alimentary products), **P-A-C** (husbandry), **P-A-O** (alimentation-other), **P-O-Ca** (handicraft-carpenter), **P-O-Co** (handicraft-tailor), **P-O-O** (handicraft-other); see Annex 11.

In absence of any further specifications almost two fifths of the data would thus offer no more information other than whether the respective borrowers are pursuing a trading or producing activity. To avoid this potential gap of valuable insights a more detailed differentiation of clients, based on the nature of products produced and/or sold is thus applied henceforth. The results are as followed: When invited to specify their activities the 83 clients who marked **C-O**, **P-A-O** and **P-O-O**, detailed 51 principal types of products which could then be clustered into the following set **(2)**: alimentation-related **(A)*** - 31.87 per cent of the given 91 answers; construction-related **(C)*** - 6.59 per cent; household-related products **(H)*** - 12.09 per cent; prime material **(M)*** - 15.38 per cent; clothing **(R)*** - 18.68 per cent; and various **(V)*** - 5.49 per cent. The other 9.89 per cent were left blank and may, for the sake of clarity, be labeled with "no information" **(N)***.[180]

By the same token those categories of set **(2)** are then also applied when evaluating accordingly which products were most affected by the price hikes in 2008. The analysis reveals the following repartition: With 189 out of 324 responses (again, one client may have given several answers) alimentation-related products **(A)*** represent the group of commodities most severely hit by the inflationary tendencies and make up for 58.33 per cent. On the other hand construction-related products **(C)*** only account for 0.62 per cent; goods for household-related purposes **(H)*** add up to another 8.64 per cent. Prime material such as iron, wood or coal is quoted 16 times out of 324, clothing in the broader sense another 41 times, thus equaling 12.65 per cent. The remaining 14.81 per cent are then divided between an assemblage of various products/services such as notebooks, stapler and transportation, and approximated 10.19 per cent of non-specified answers **(N)***.[181]

Fig. 15 **Structuring the results of the questionnaire**



[180] The number of answers exceeding the number of interviewees indicates that a number of survey clients have declared several business foci in the range of their micro-enterprise; set of categories **(2)**; See Annex 13.
[181] See Annex 14.

Reviewing these categories, a certain degree of redundancy should naturally become apparent between the survey's original client groups **(1)** and those identified only after the actual data evaluation **(2)** - i.e. based on the empirical repartition of goods produced/sold or respectively of the products most affected. At this point, two remarks may therefore be appropriate on this behalf. First, the definition of clusters derived from details given under **C-O**, **P-A-O** and **P-O-O** (and thus **(2)**) would ultimately represent but a more precise description of the questionnaire's original groups of business activities **(1)**. Subsequently, the existence of rather similar categories was quite predictable. Secondly, it is important to evoke the social and educational environment in which the survey has been conducted. Some clients might not have fully understood certain questions, implying that rather unspecified answers were given which in fact could have been attributed directly to more informative categories such as "Retail – Alimentary Products" (**C-PA**) or "Production – Alimentary Products" (**P-A**) for instance.

While statistically certainly not without flaws, it is possible to intuitively combine the results obtained through the analysis of the two sets of data **(1)** and **(2)**. Eventually, some common trends could hereby be derived which would allow for a better understanding of AW' client portfolio and thus render a first extrapolation of the borrowers' behavior more feasible. After all, the repartition of answers given in the context of the questionnaire's original categories **(1)** largely confirms the client clusters which could then be identified thanks to the additional data specification in **(2)**. Put in other words, both analytical approaches (i.e. based on business activities on the one, and specific goods produced and/or sold on the other side) isolate food products and clothing as the largest merchandise groups AfricaWorks' clients are dealing with. Under **(1)** all food- and clothing-related occupations sum up to 52.27 per cent of all 220 answers while under **(2)** nearly the same percentage (i.e. 50.55 per cent, and thus 46 of the 91 answers) is associated with **(A)*** and **(R)***. The remaining categories of **(1)** might then be adapted to those of **(2)** accordingly. It becomes however obvious that no precise quantification in terms of borrowers is possible due to the option of multiple answers.[182]

[182] See Annex 16.

To conclude it may suffice to say that the 6 groups derived under (2) – excluding (N)* – do plausibly define AfricaWorks' client clusters. The closer look on the coping strategies of the various groups of MF beneficiaries is then the subject of the following section where interviewed borrowers are analyzed in relation to their respective business environment.

5.3.3 AfricaWorks' clients in relation to their business environment

In addition to the earlier given description of clusters in the context of **Porter's Diamond** (see 5.3.1) another concept which can be related more explicitly to the field of development sciences has then adopted a slightly adjusted definition of clusters. The **Model of Collective Efficiency** thus describes clusters as "groups of producers making similar things in close vicinity to each other"[183]. Considering the implications of group-lending this definition seems quite adequate in the case of AW.

Input Factors (1)

By and large the country stays a net importer. Until today a considerable share of the traded commodities originates from neighboring countries such Malawi, Swaziland, and predominantly South Africa. Physical infrastructure is still poor - although improving - and the agricultural sector largely characterized by low productivity and inefficiencies.[184] With means of transportation being costly, too, Mozambican microentrepreneurs face a significant price pressure on their goods and businesses depending to a large extend on the fluctuations on the international energy markets. While the study lacks a comprehensive statistical comparison between MF beneficiaries and non-recipients of small scale loans it is nonetheless easily conceivable that the clients of a MFI tend to benefit from a facilitated access to monetary and material funds. Prolonging that thought one may hence conclude that MF beneficiaries could respond more flexibly to potentially arising investment opportunities while their operations tend to profit more easily from prospective economies of scale.[185]

When asked whether the commodity price inflation would adversely affect the beneficiaries' businesses an average of 82.07 per cent confirmed the increased price pressure. A statistically sound conclusion regarding the potential differences between client groups happens however quite difficult to be reached, for the survey

[183] Döge/Neven (2000) p.6.
[184] OECD – AfDB (2008), p.461; and see AfricaWorks (2008b), p.6.
[185] See structure of argumentation adapted from BCI (2004), p.36.

has been conducted rather randomly in terms of interviewees per office, loan product and business activity. As a result, the data can not exclude a certain bias – e.g. half the clients were surveyed in Xai-Xai, thus entailing the whole set of data to reflect trends which are principally attributable to this particular office; the same is then true for the diverse business activities, in which case a statistically viable differentiation between the earlier defined client clusters remains to some extend intuitive.

Only through the evaluation of the additional comments made by the surveyed borrowers on their economic situation can certain differences in coping capacities be observed. Thus, entrepreneurs who have engaged in construction and construction-related business activities - typically fulfilling the profile of individual borrowers operating with larger loan volumes - seem to be somewhat better positioned than the numerous members of lending groups with a classically smaller business size. One can but assume that the roughly five per cent of AW's clients soliciting individual, larger loans fully benefit from prevailing economies of scale and are hence able to shield their business relatively well from inflationary pressure. When reviewed as a whole the survey generates however no viable evidence for a significant share of borrowers who would have engaged in any major changes of entrepreneurial behavior.

Competition and rivalry (2)

Clients are typically united in groups of similar occupation. A fairly high score of rivalry is hence expected as MF beneficiaries within the same group often display a significant level of homogeny with respect to the offered goods. Moreover, microenterprises are no multinational corporations and the lack of product differentiation is characteristic. Considering for instance those market participants merged under **(A)***, i.e. alimentary products, any brand identity by goods is literally impossible. The supply concentration tends to be acutely high as the members of a group are habitually located in a same market place where prospective customers (i.e. the consumer, not MF clients) are then generally free to choose among up to 20 vendors offering a virtually identical merchandise (e.g. tomatoes, tangerines or lemons). The risk of product substitution by the consumer hence represents a significant reduction of the vendor's bargaining power towards his/her customer; suffices to say that ultimately this market structure implies a situation of nearly

perfect competition where retailers are fairly restraint in their price setting. In order to still explain long term bonding effects between a particular seller and buyer the consideration of social links such as friendships or accustomed acquaintances for instance might then represent a more comprehensive reference than the mere product differentiation.[186]

Considering the homogeneous nature of goods and the low level of market complexity – especially in the case of **(R)*** and **(A)*** – entry barriers are relatively low. Depending on the size and location of a business the number of fellow market participants can vary on a daily basis. As clients of AfricaWorks represent however microentrepreneurs with a certain routine and practice they business location is typically fix on the medium run.[187] Vendors of groceries and clothing for instance would classically offer their merchandise in a common market place or a lodge (owned or rented) where officially a monthly or weekly fee has to be paid to the supervising market authorities. Other than these geographical and administrative entry barriers MF beneficiaries might benefit from a certain cost advantage and operative economies of scale as their access to increased funds would allow them to effectuate larger purchases at once and save on transportation and time. In other words, most likely easier than other market participants at a comparable level of economic development can microloan recipients pool their funds and reduce expenses, as e.g. one single but large refilling of stocks typically results more cost-efficient than several smaller re-buys. A larger perspective then also allows for the recognition of a constant trade-off between the collective funding and the potential rivalry due to the natural geographic vicinity of group-lending programs.

Demand Factors (3)

While the consumer only features relatively low switching costs between the different vendors in a market place the dependency on the market as a whole tends to remain comparatively high. Certainly, a single retailer is bound by the competitive market price equilibrium; larger, unilaterally initiated price deviations are thus virtually impossible. The market as a whole however can act like a

[186] See BCI (2004), p.37;
Further reasoning is based on the various discussions with AfricaWorks' loan officers and observations made by the author when conducting interviews with the clients in the local market places.
[187] See AfricaWorks (2008a), p.7.

monopolist in terms of price alterations (at this point no difference is made between proactive price increases and reactive upsurges as a response to external influences such as 2008's worldwide commodity price inflation). In case market prices augment on the whole consumers typically display but a marginal flexibility in their consumption spending decisions while their bargaining power is then most likely to lessen considerably, too.[188] Data of the questionnaire then largely confirm the hypothesis developed throughout the discussions in ***(1)*** and ***(3)***: More than half the surveyed clients state that their customers are in fact not cutting down their purchases. As describe just above the consumer faces a general market development which s/he is unable to fully offset by altering the original patterns of consumption. In their role as merchants MF beneficiaries must consequently not be expected to significantly change their business behavior neither. Not surprisingly most interviewees declare to suffer from increased wholesales prices through shortfalls in their profit margin rather than through a reduced demand or a falling number of customers.[189]

Substitutes (4)

The conclusions drawn from the discussion in ***(2)*** and ***(3)*** consequently also shorten the list of conceivable new insights which might have been anticipated from studying the risk of product substitution. Thus, a buyer would always increase his/her bargaining power at the expenses of the seller should goods be easily interchangeable. It emerges that comparable situations are then easy to identify for the case of product groups and client clusters assessed earlier: Merchants dealing with food products or clothing for instance are facing an exceptionally high risk of substitution. Even more, among the commodities causing the most distress for the interviewed clients, staple foods such as rice or flour rank highest.[190] Due to the strong competition most retailers are then also attributed a very low capacity of profitable price setting and eventually lead the paper to resume that the threat posed by *price substitution* through the trader is very low while the threat of a buyer-initiated *product substitution* is acutely high for clients associated with **(A)*** or **(R)***.[191]

[188] See BCI (2004), p.36.
[189] See Annex 12.
[190] See Annex 14.
[191] See Porter (1998a), p.4; see also Porter (1998b), pp.4 and following.

Suppliers and related industries (5)

As already seen at an earlier stage of discussion a significant share of the in Mozambique traded goods (including inputs of production) are imported from South Africa and a number of other neighboring countries. In numerous cases local merchants purchase their goods outside the domestic borders. The bargaining power of their suppliers frequently exceeds their own as switching costs prove to be relatively high. The expensive and time-intensive traveling between Mozambique and South-Africa for instance represents a comparatively great effort for the local merchant. Intuitively these pre-investments may be defined as sunk costs which tend to lower the microentrepreneur's flexibility and bargaining power towards the respective supplier. Eventually, the Mozambican trader would have to accept the wholesales prices offered by the foreign counterpart without the possibility of a more detailed comparison.

On the other side, MF beneficiaries are likely to have more financial resources at their disposal, which would allow them re-gaining some of their bargaining power by means of potentially offered discounts when purchasing larger quantities. Again the impression of microloan recipients to display a higher level of economic stability is strengthened as under the described circumstances AW's clients would be better equipped for the interaction with their surrounding business environment than those market participants without the access and/or knowledge to additional financial funds.[192]

5.3.4 Behavioral responses to the commodity price inflation

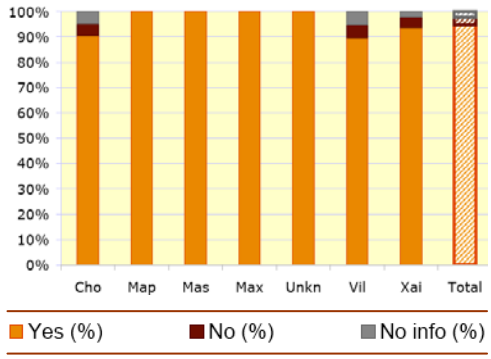
When asked about their future financial plans and whether increased commodity prices would adversely affect their borrowing behavior the vast majority of clients interviewed in the relation to the survey have signaled no major deviation from their originally planned loan schedule. Certainly, profit margins have decreased as a result to inflationary market developments. Nonetheless, the entrepreneurial behavior of AW' clients has – so far – not changed significantly.

The only noteworthy observation to be made at this point is that those borrowers who are operating with lower loan volumes (between 1.200MZM and 8.000MZM)[193] typically refrain from an extensive enlargement of their credit size. In times of

[192] See BCI (2004), p.37.
[193] See Banco de Moçambique (2009).

higher economic pressure the shrinking operational profits many clients are faced with have the tendency not to justify the risk and weight of higher interest and repayment rates. Yet, no significant downgrading is to be observed. The mass of borrowers interviewed on the subject did not report any drastic reductions in terms of the solicited loan volume (Fig.16) nor a substantial discontent with the services and methods provided by AW.[194]

Fig. 16 **Future loans planned (%)**



Seen from a wider angle those statements indicate a certain, intermediary equilibrium: A large number of microloan beneficiaries might consequently have been impeded from improving their economic situation within the range of a high price scenario – the general deterioration of AW' client portfolio does however lack of substantial evidence, too. Over the past couple of months the ratio of active to total clients has not changed appreciably, hence suggesting that borrowers are for the most part continuing their investment schedule. Subsequent to the absence of major alterations in borrowing patterns the threat for the MFI to loose interest incomes from forgone contracts results hence to be of an only minor importance.[195]

Results from the survey which include numerically non-representable yet highly informative comments suggest that the commodity price inflation might affect microfinance beneficiaries more severely in their role as private households rather than as market participants. The reasoning is hereby done through process of elimination. As clients do not exhibit considerable changes in behavior in the range of their businesses, the potential cuts in expenses in order to cope with increased costs of living can be effectuated but in terms of private consumption. This eventuality considered, coping strategies of AW' clients seem to subscribe to the general trend of low-income earners towards price hikes; the severity of economic distress appears however cushioned up to a certain degree as MF beneficiaries typically display a superior level of economic security.

[194] See Annex 15; note AW offices: Chokwé (Cho), Maputo (Map), Massinga (Mas), Maxixe (Max), Vilanculos (Vil), Xai-Xai (Xai).
[195] See Annex 17 "Active vs. Total clients".

6 Discussion

With the ultimate goal of better defining the potential role of MF in weathering economic distress in Third World countries the paper has effectuated an ample analysis which would also place the concept in the larger context of effective development aid. Last year's price developments on international commodity markets have caused serious concern around the world. Naturally, the most severe repercussions have been felt in developing and least developed regions. In order to lead a prudent discussion on the various relief options – and in particular about microfinance – a sound comprehension of the actual economic framework became thus necessary. Throughout the first chapters the paper has therefore been eager to retrace the steps that lead to the record price highs as well to study its impact on the most vulnerable social layers. In addition to weather-related shortfalls in production, globally declining stocks and general deficiencies in agricultural production, a number of complementary factors have then but aggravated the situation and compelled local authorities and international aid organizations to take action. The resulting picture displays the highly complex interaction between inflationary price developments and poverty, demand and supply side patterns as well as the various short, medium and long term policy interventions which have been designed to alleviate the economic distress. Besides the immediate response options such as emergency food distribution and short term material or financial support, experts also recommend longer term orientated measures, including for instance the investment in social safety nets, agricultural policy reforms and the expansion of MFIs to sustain microentrepreneurs' economic security.

Following those considerations, a central objective of this paper was then to answer how microfinance as one of those relief strategies might become affected itself by the commotions associated with increased commodity prices.

6.1 Inflation – a catalyst for ongoing transformations

Recapitulating the key insights which could be derived in the scope of this paper it is now possible to answer the majority of the central research questions and enlarge the perspective on the subject.

6.1.1 Prospects for the clients

The initial motivation of research relates to the high price scenario on international commodity markets and the respective impacts on the MF sector. It is important to note that the relevant timeframe of research is hereby set until midyear 2008. The analysis does hence not consider the most recent price decline and the results may have to be reviewed anew relative to the changed market situation.

As OECD officials and researchers from the Institute for World Economy (IfW) state "a return of real commodity prices to levels seen before the commodity boom started seems unlikely at this stage [; however] real commodity prices are expected to retreat substantially in 2009 from their record levels reached in 2008."[196] Consequently, consumers who have suffered intensely from the sharp increase of their living expenses would clearly benefit from the détente on international markets. A similar conclusion is drawn by Martin Rohler, Senior Consultant at LFS Financial Systems (a MF Consultancy headquartered in Berlin with long term experience in Mozambique). In an interview from October 7, 2008, Mr. Rohler appraises the economic struggle seen in Third World countries as an entirely predictable concomitant during the transition towards a new price equilibrium. Thus, while on the short run a certain level of overshooting might be observed, markets are to calm down eventually as customers adapt to the new price settings. Quite similar statements were made by a number of AW's clients – although they customers may tend to delay their purchases more than usual, commodities such as rice or flour are still ultimately bought. Considering both research results and the most recent market developments it appears hence plausible to conclude that MF beneficiaries are in no acute financial distress.[197]

6.1.2 Prospects for MFIs

One of the central incipient assumptions of this research was the close relationship between MFIs and their clients. Should borrowers suffer from substantial financial shortages over a longer period of time, the lending institution is expected to eventually be adversely affected, too. As the empirical results disclose however, MF beneficiaries have shown no significant behavioral changes in their borrowing patterns and are consequently unlikely to prompt MFIs to initiate immediate policy changes.

[196] IfW (2008).
[197] Rohler (2008).

Nevertheless, one might expect that the strong price development during the early months of 2008 had other, secondary effects such as the increase of awareness for MFIs to become economically more self-sufficient and secure their operational survival on the long run. In other words, the commodity price inflation may not have caused direct, major changes in MFIs' policy sets – the signaling effect could however accelerate the already ongoing transformations of the sector, i.e. the organizational consolidation and implied focus on sustainability.

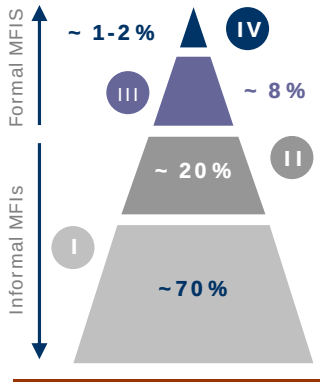
6.2 Ways to increase operational sustainability

In the context of securing medium and long term sustainability of MFIs' operations a wide range of strategies has been designed over the past couple of years. Among them two major trends have become more prominent and shall therefore be discussed here shortly.

6.2.1 Conversion from a NGO to a MF-bank

First, an increasing degree of commercialization in terms of services and products becomes obvious. According to this basis of measurement the many MFIs operating today can be categorized into two major groups (formal and informal MFIs) and two sub-sets: With roughly 70 per cent start-up MFIs constitute the largest market share **(I)**. Their operations are mostly unprofitable and MF does not necessarily represent the institutions' primary focus. Then, another fifth of all MFIs which mainly consists of NGOs is approaching profitability **(II)**. Together, **(I)** and **(II)** make up for roughly 90 per cent of the total market; yet considering the institutions' outreach, most of the sector's performance stems from the approximately 150 most mature, largely regulated and well known MFIs **(IV)**. Finally, another eight per cent of smaller, less known institutions are already very close to reaching the operational break-even point and the vast majority has grown into viable candidates for an institutional transformation to ultimately become proper MF-banks **(III)**. "This trend notably reflects the idea that [turning into] a more formal financial institution helps to reach financial sustainability as it facilitates

Fig. 17 Types of MFIs



Source:
DB Research (2007), p.6.

access to commercial borrowing and deposit-taking."[198] While those maturing MFIs (**(3)** and **(4)**) are progressively more integrated into the respective local financial sector the bulk of organizations (**(1)** and **(2)**) remains at the level of externally funded and/or co-financed NGOs, eventually leading to an even more pronounced differentiation between formal and informal institutions than can be observed today.

As seen earlier already similar market trends can be identified in Mozambique, too. Former NGOs such as NovoBanco, SOCREMO and Tchuma are now serving their clientele under the legal status of a bank. And while at the present day AfricaWorks officially still remains a NGO the long-term plan of action is the conversion to a larger-scale institution which also allows for the management of micro-deposits and savings accounts. The currently still stagnating figures of saving volumes (currently still labeled "garantias" as no actual interest payments are permitted) may then also experience a clear upwards trend and ultimately offer the institution a new source of internal founding as well as to expand its lending services.[199]

6.2.2 Agribusiness

In addition to the conversion from a NGO to a bank another strategy's viability has been discussed in the context of fostering a MFI's sustainability, i.e. the enlargement of operations into the rural industries. The reform of the agricultural sector counts among the key policies to secure long term economic and nutritional security in many developing countries. So far - and "[d]espite the disproportionate concentration of poverty in rural areas around the globe [-] microfinance […] has tended to gravitate away from rural borrowers. As the industry matures, however, practitioners are increasingly turning to the vast and largely under-served rural frontier […]."[200] Since October 2007 AfricaWorks has subscribed to this trend, too and is lately following a more holistic approach of wealth creation and economic empowerment. With the enlargement of its scope of operations to the rural sector the institution now integrates MF and agribusiness activities into what eventually may become a closed circuit of production and retail. In order to master the challenges associated with serving the scantly populated areas of rural Mozambique (e.g. great distances between clients, poor networks of transportation and acutely low income

[198] DB Research (2007), p.6.
[199] See Annex 7.
[200] CGAP (2005), p.1.

levels translating into inefficiently small volumes of financial transactions) AW has then developed an agribusiness program which is employing similar structural elements as a number of other successful projects earlier. Akin to the Rural Group Enterprise Development Program launched by the Cooperative League of the USA (CLUSA) in the mid-1990s the institution supports local farmer associations, providing extensive training to the respective group members as well as linking producers to commodity traders in their vicinities.[201,202] At the current stage of development a total of 350 farmers are working under the wing of the agribusiness program which is scheduled "to achieve sustainability and profitability over a period of three years."[203] Consequently, in 2010, no more donor-funding should be needed to finance the farmer associations' inputs of production. On the long run, AW has envisaged the program to further generate value added and allow for a continuous auto-refinancing of its services "throughout the value supply chain by availing affordable financial products to clients in microfinance, agribusiness and SME development."[204]

6.3 Room for further research

A number of questions and answers could be discerned with respect to the impact of high price scenarios on the MF sector. Nevertheless, only a fraction of the complex set of information could be treated here and the offered approach represents but one of several conceivable methodologies. As for the empirical data discussed in the context of the case study of AfricaWorks another clustering of clients by regions could have been imaginable as well (in contrast to the clustering by business activities and goods traded). In view of the relatively restricted set of data and the additional geographical bias the analysis did however omit a detailed discussion on this particular subject. Moreover, a comparison between MF beneficiaries' and non-MF beneficiaries' coping capacities with inflationary market trends could be of interest for future studies as well as the closer analytical look on agribusiness as a viable instrument for securing a MFI's operational sustainability. All in all, the paper subscribes to an ongoing discussion where the subject still offers a considerable potential for further research in multiple directions.

[201] CGAP (2005), pp.1-4.
[202] Other than in case of its traditional MF branch AW mostly supports the largely inexperienced rural population providing land, training and loans in form of seeds, materials and fertilizers.
[203] AfricaWorks (2007), pp.6-7.
[204] Loc. cit., p.7.

Appendix

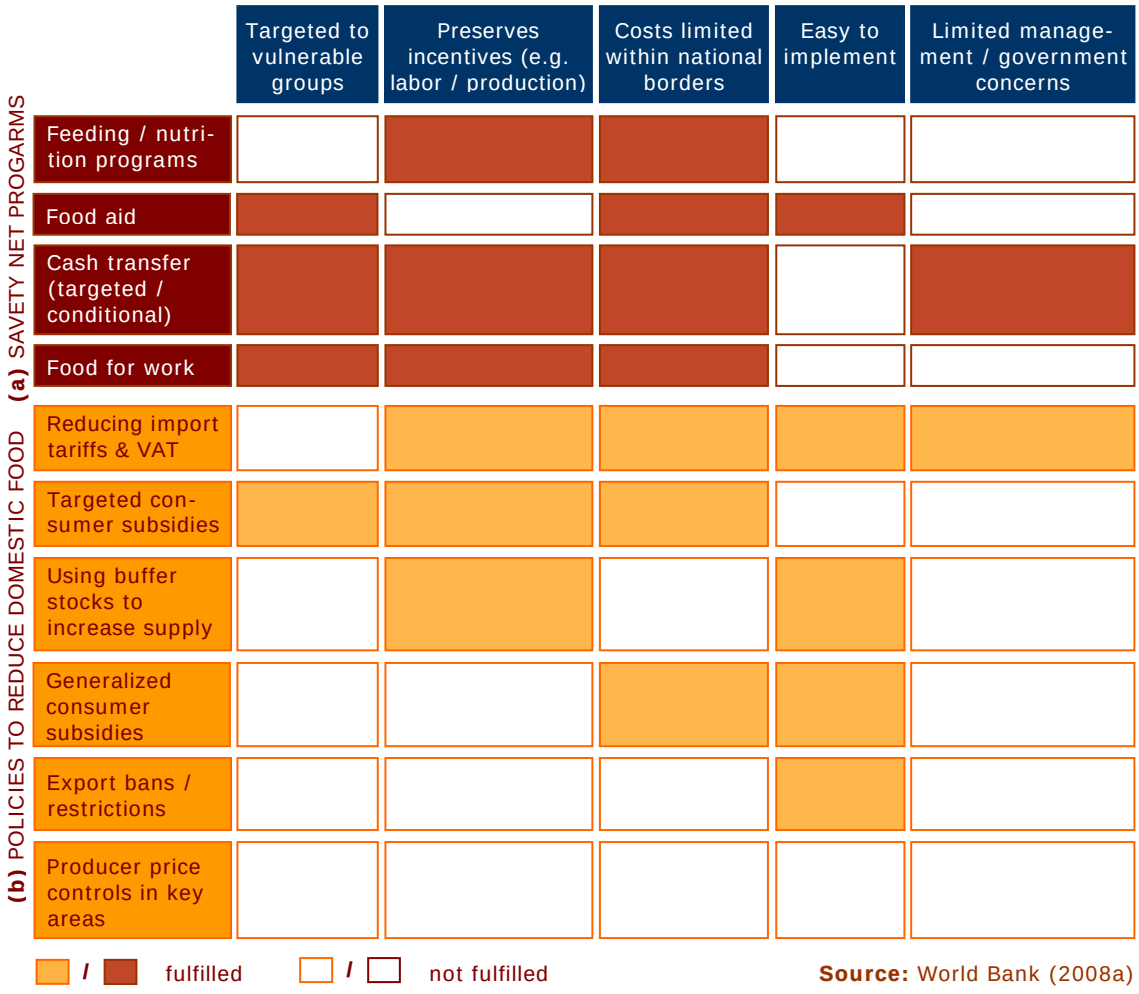
Annex 1	Demand Side Factors	Supply Side Factors
Cyclical Factors	- Low and declining stocks causing speculative demand on the agitated financial markets - Precautionary demand for staple foods in order to replenish stocks - Increasing share of crop used for biofuel production	- Adverse agro-climatic conditions causing poor harvest in exporting countries - Decreasing productivity of food production - Institutional policy changes (such as export restrictions) of key rice producers entailing increased price volatility - Deviation of crops for biofuel production
Structural Factors	- Economic growth and consequently boosted demand of emerging markets such as India and China - Overall increasing demand associated with global demographic development	- Increased prices of petroleum translating into higher costs of transportation and increased prices of fertilizers eventually causing higher overall costs of production - Persisting market price distortions due to food aid and production subsidies - Organizational deficiencies in agricultural production (due to policy failure, adverse sectoral priorities, urbanization, ignorance of women's role in agricultural food production)

Annex 2 — **Declining stocks and adverse policy effects**

In addition to earlier remarks, a "number of changes in the policy environment since the Uruguay Round Agreements have been instrumental in reducing stock levels in major exporting countries" (FAO (2008)). To provide a better grasp of the matter we shall give the following example where policies stipulate that in view of minimizing price distortions, public stockholding - including for purposes of food security - has to be effectuated at current market prices. Not surprisingly this procedure often led to increasing costs for purchasing institutions and consequently to declining quantities of public buffer supplies. The capacity of authorities to cushion price peeks and absorb greater food market irregularities is thus severely impeded(see FAO (2008b)). And while public food agencies as well as the numerous international organizations may exhibit no particular motivation for profit realization - but rather operate with the intention of cost control - their precautionary demand to meet future price hikes typically tends to cause a similarly supply-shortening effect as private consumption.

Moreover, policy responses of some of the major exporting countries, originally conceived to protect their domestic economies, have then mostly contributed to aggravate the already tense situation on international commodity markets. The implementation of export bans and price floors has directly translated into further shortfalls, inducing traders and consumers likewise to search for alternative ways to secure their reserves. Eventually, the attempt to replenish decreasing stocks only results in a self-enforcing effect of further supply shortages and at numerous occasions has been accompanied by hoarding, aimed to minimize adverse effects of anticipated price hikes in the future. Also have there been repeated reports about purely opportunistically motivated merchants who would try to generate windfall profits by creating artificial shortages and boost inflation in the local markets (see Rahmen et all (2008)).

Annex 3 **Policy Effectiveness Summary**

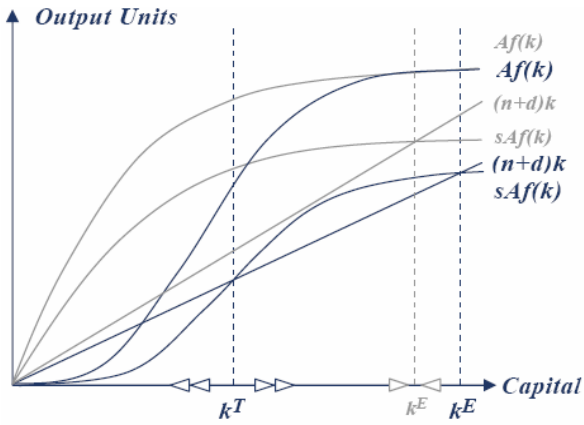


Annex 4 **Most common microfinance instruments**

- **Micro loans**: small loans issued to the economically active poor
  - **Group based instruments**: solidarity group loans consisting of 5 to 20 members
  - **Individual loans**: small loans issued to single clients for entrepreneurial and private purposes (*working capital loans / agricultural loans / emergency loans / home improvement loans / consumer loans / etc.*)
- **Micro savings**: deposit account for mandatory and voluntary savings without payment floors (i.e. without a minimum balance)
- **Micro leasing**: designed for micro-entrepreneurs or -businesses unable to buy the necessary equipment at full costs (*agricultural machinery or vehicles, etc.*) - often cost floors of the leased items
- **Micro insurance**: insurance services adapted to the financial restrictions of low-income earners (*property insurance / health insurance / life insurance / disability insurance / etc.*)

Source: Principles of microfinance and microcredit (2008).

Annex 5 **Poverty Trap in the neoclassical Growth Model – Minimum Capital Stock**



Production function Af(k)

A factor productivity and constant
k capital-labor ration
s national saving rate
d rate of capital depreciation
n demographic growth rate

The standard neoclassical model (NCM) typically assumes that the economy *inevitably* grows when *k* is very low (graphics depicted in gray). In reality that represents but a special case – and not even very plausible; for when k is very low marginal productivity of capital tends to be very low, too (contrary to infinite as in the standard model). The reason is that a minimum capital stock would be necessary before more efficient, modern production processes can be used (e.g. factory production necessitates basic electronic ture, roads, a qualified work force , etc. first. Without these essential requirements being fulfilled, small-scale increments of capital ($<k^T$) may have little to no effect at all where subsequently no sustainable growth can be achieved in equilibrium. Conversely, once the vital infrastructure is available, marginal productivity of capital may in fact increase at lot in low-income countries and a long term "above-zero" growth rate can be reached (k^E), while the country in question is lifted out of the poverty trap.

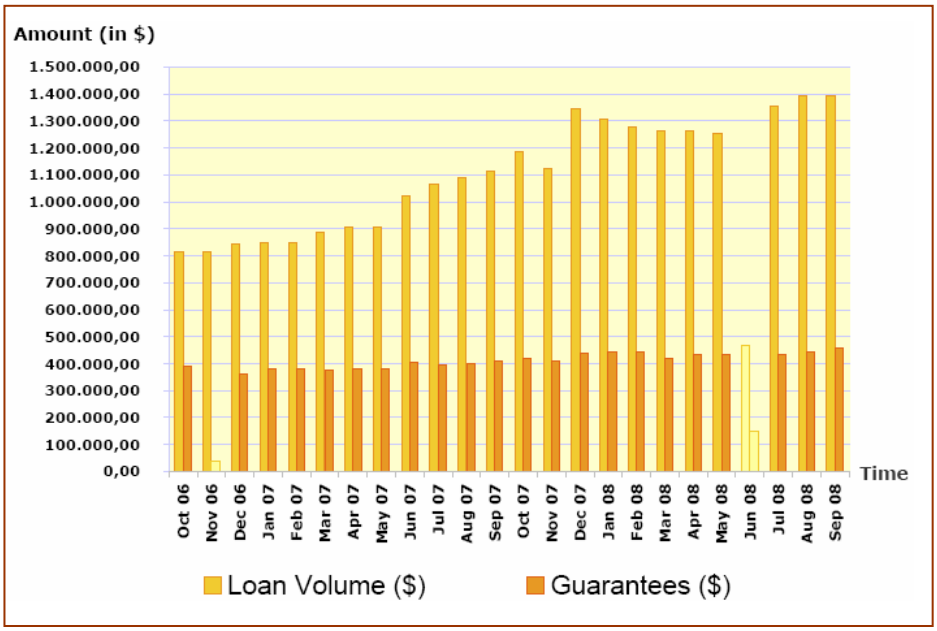
Annex 6 **Number of active borrowers of the five largest MFIs in Mozambique**

	1999	2000	2001	2002	2003	2004	2005	2006	2007
FCC	2931	4438	6121	7196	9831	2867	2395	3033	2801
Tchuma				5127	6154	7229	9194	9004	10174
SOCREMO		1742	2904	5485	5931	5897	6377	10209	*12727*
NovoBanco		301	3168	7277	8178	1135	15587	21181	26738
BOM							2611	4931	7297
Total	2931	6481	12193	25085	30094	17128	36164	48358	59737

Market share in terms of active borrowers of the five largest MFIs

	2002	2003	2004	2005	2006	2007
FCC	28,69%	32,67%	16,74%	6,62%	6,27%	4,69%
Tchuma	20,44%	20,45%	42,21%	25,42%	18,62%	17,03%
SOCREMO	21,87%	19,71%	34,43%	17,63%	21,11%	*21,31%*
NovoBanco	29,01%	27,17%	6,63%	43,10%	43,80%	44,76%
BOM	0,00%	0,00%	0,00%	7,22%	10,20%	12,22%
Total	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%

Annex 7 Loan Volume & Guarantees (AfricaWorks)



Annex 8 Loan product specifications - AfricaWorks

Community Group

Loan Cycle	Monetary Values	Monetary Guaranties (%)	Term (Months)	Frequency of Payments
1	1.500,00 - 4.000,00	0%	4 to 6	Two-weekly or monthly
2	4.100,00 - 8.000,00	10%		
3	8.100,00 - 15.000,00	15%		
4	15.100,00 – 20.000,00	20%		

Special Group

Loan Cycle	Monetary Values	Monetary Guaranties (%)	Term (Months)	Frequency of Payments
1	10.000,00 - 15.000,00	15%	4 to 6	Monthly
2	16.000,00 - 30.000,00	20%		
3	31.000,00 - 50.000,00	25%		

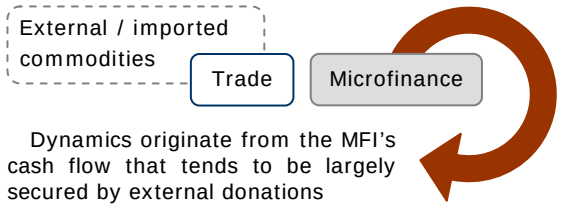
Solidarity Group

Loan Cycle	Monetary Values	Monetary Guaranties (%)	Term (Months)	Frequency of Payments
1	10.000,00 - 30.000,00	15%	4 to 6	Monthly
2	31.000,00 - 100.000,00	15%		

Individuals

Loan Cycle	Monetary Values	Monetary Guaranties (%)	Term (Months)	Frequency of Payments
1	10.000,00 - 200.000,00	15%	2 to 12	Monthly
2	201.000,00 - 300.000,00	20%		

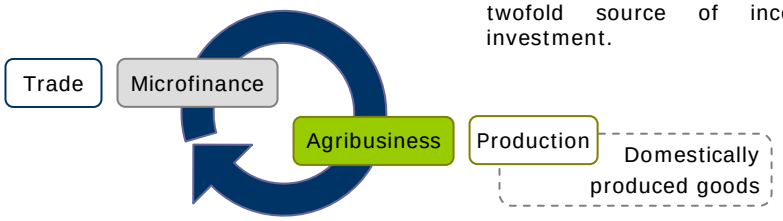
Annex 9 MF & Agribusiness: An integrated cycle of production and retail



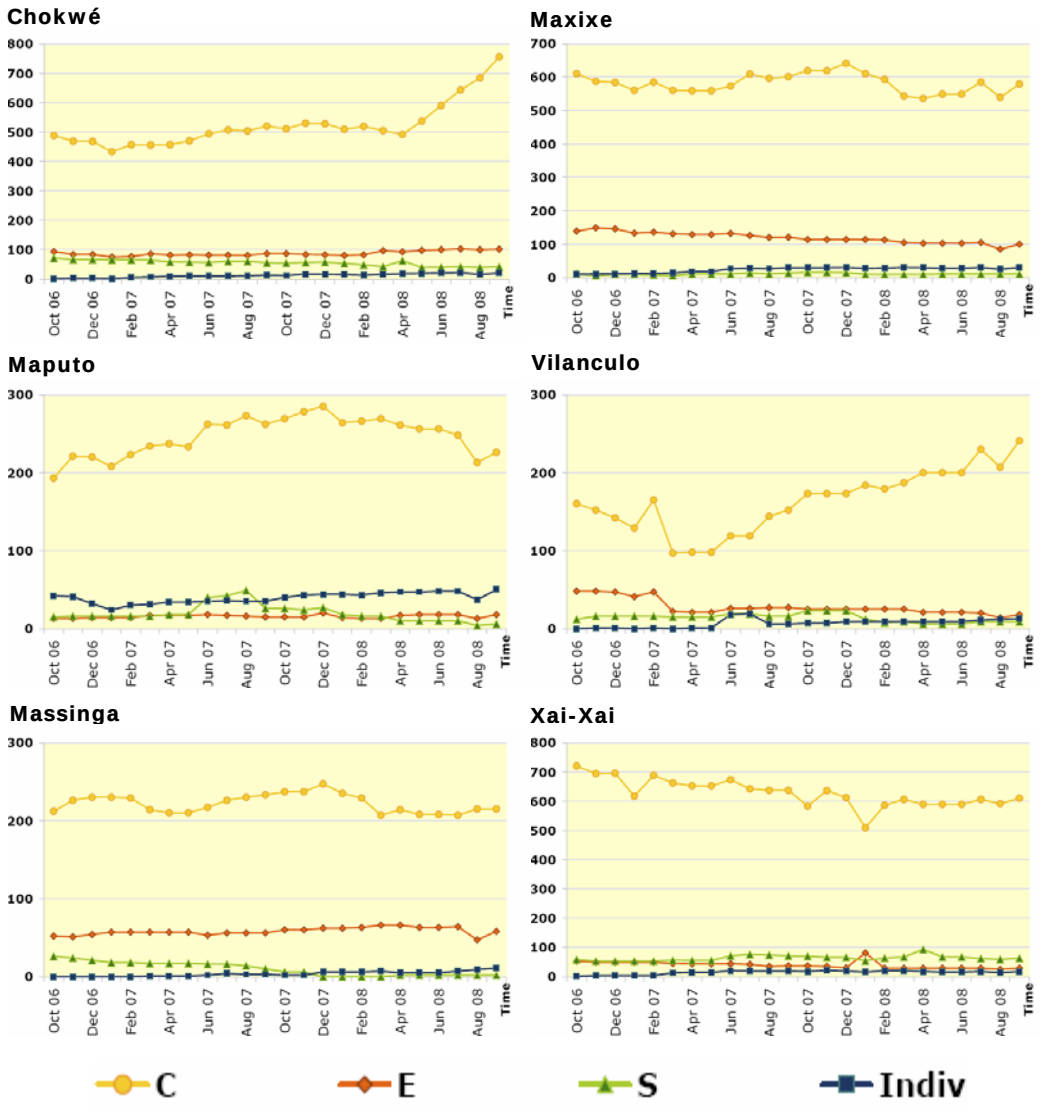
Dynamics originate from the MFI's cash flow that tends to be largely secured by external donations

Through agribusiness the sector might reach a higher level of quality and solidity. For through the insertion of internally produced commode-ties the economic circle which connects financial assets with real goods could be closed and growth might by auto-sustainable.

➡ Higher risk diversification and a twofold source of income and/or investment.



Annex 10 Clients per MF instruments by region



Annex 11 Business Foci of AW's clients per region

	Total	%	Rank	Cho	Map	Mas	Max	Vil	Xai	Unk
C-PA	74	33,64%	1	3	1	9	13	11	37	
C-Q	10	4,55%	5			3	1		6	
C-M	13	5,91%	4	4		7	1		1	
C-R	28	12,73%	3	3		5	2		18	
C-O	73	33,18%	2	11		7	9	8	37	1
P-A	1	0,45%	9						1	
P-A-C	5	2,27%	7			1			4	
P-A-O	2	0,91%	8	1					1	
P-O-Ca	1	0,45%	9						1	
P-O-Co	5	2,27%	7					1	4	
P-A-O	8	3,64%	6	1		1	3		3	
Total # of answers	220	100,00%		23	1	33	29	20	113	1
# of interviewees	184			21	1	32	18	19	92	1

Annex 12 Impacts of increased commodity prices on clients and consumers

a - Reductions in consumers' demand due to increased commodity

	Total	%	Cho	Map	Mas	Max	Vil	Xai	Unknown
No	97	52,72%	9		27	11	11	38	1
Yes	21	11,41%	10		2	1		8	
0% - 30%	46	25,00%			2	4	4	36	
30% - 60%	13	7,07%		1		1	3	8	
60% - 100%	3	1,63%	1			1	1		
no info	4	2,17%	1		1			2	
Total	184	100,00%	21	1	32	18	19	92	1

b - Reductions in stock keeping consequent to potentially lower profits

	Total	%	Cho	Map	Mas	Max	Vil	Xai	Unknown
No	17	9,24%	5		1	2		8	1
Yes	27	14,67%	14			1	1	11	
0% - 30%	105	57,07%			26	3	14	62	
30% - 60%	7	3,80%			4	2	1		
60% - 100%	11	5,98%		1	1	6	2	1	
no info	17	9,24%	2			4	1	10	
Total	184	100,00%	21	1	32	18	19	92	1

c - Observations by the client regarding increased costs of production

	Total	%	Cho	Map	Mas	Max	Vil	Xai	Unknown
No	0	0,00%							
Yes	2	10,00%	1					1	
0% - 30%	5	25,00%					1	4	
30% - 60%	4	20,00%				2		2	
60% - 100%	2	10,00%				1		1	
no info	7	35,00%	1		2			4	
Total	20	100,00%	2	0	2	3	1	12	0

d - Observations by the client regarding increased costs of procurement

	Total	%	Cho	Map	Mas	Max	Vil	Xai	Unknown
No	10	5,85%				2		8	
Yes	19	11,11%	6			1	1	11	
0% - 30%	111	64,91%	9		26	3	14	58	1
30% - 60%	9	5,26%	2		4	2	1		
60% - 100%	13	7,60%	2	1	1	6	2	1	
no info	9	5,26%				2		7	
Total	171	100,00%	19	1	31	16	18	85	1

Annex 13 — **Details regarding "Other": C-O, P-A-O and P-O-O**

	English	Portuguese	Total	Cho	Map	Mas	Max	Vil	Xai	Unk	% per Group
A	Bottle store	Barraca - Bebidas alcoólicas	1	1							3,45%
	Cakes	Bolhos	1						1		3,45%
	Cakes	Bolinhos de sura	2				2				6,90%
	Meat	Carne	1	1							3,45%
	Mackerels	Carapao	1						1		3,45%
	Cashew nuts	Castanha do cajo	2						2		6,90%
	Cattle breeding	Criacao de vacas	0								0,00%
	Chicken	Frangos	2	1					1		6,90%
	Vegetables	Hortículas	4	1					3		13,79%
	Corn	Milho	5	1					4		17,24%
	Bakery	Padaria	1	1							3,45%
	Fish	Peixe	0								0,00%
	Fisher	Pescador	2	2							6,90%
	Pig breeding	Pourcos	0								0,00%
	Soft drinks	Refeicoes	5				1		4		17,24%
	Restaurant	Restaurant	2						2		6,90%
	A - Total	**31,87%**	**29**	8	0	0	3	0	18	0	100%
C	Beams	Barrotese estacas	1					1			16,67%
	Civil engineering	Construcoes civeis	1						1		16,67%
	Building material	Material de construcao	4				3		1		66,67%
	C- Total	**6,59%**	**6**	0	0	0	3	1	2	0	100%
H	Buckets	Baldes plasticos	1				1				9,09%
	Chandler	Cerareiro	1						1		9,09%
	Electronics	Electronicas	1				1				9,09%
	Tableware	Loica	4						4		36,36%
	Pharmaceuticals	Medicamentos	1			1					9,09%
	Pots	Panelas	1						1		9,09%
	Cell phone credits	Recargas	1	1							9,09%
	Trade: Plates vs. utility sinks	Troca (pratos vs. bassias)	1						1		9,09%
	H - Total	**12,09%**	**11**	1	0	1	2	0	7	0	100%
M	Wire	Arames	1						1		7,14%
	Coal	Carvao	2			1			1		14,29%
	Carbonizer	Carvoeiro	2	1					1		14,29%
	Glazier	Cristaleiro	0								0,00%
	Ironware	Ferragem	3					1	2		21,43%
	Scrap iron	Ferro velho	1						1		7,14%
	Timber	Madeira	1						1		7,14%
	Lube oil	Oleo lubrificante	1			1					7,14%
	Stationaries	Papelaria	1	1							7,14%
	Nails	Pregos	1						1		7,14%
	Glassware	Vidrio	1						1		7,14%
	M - Total	**15,38%**	**14**	2	0	2	0	1	9	0	100%
R	Slippers	Chinelos	1			1					5,88%
	Wool	Lenha	3						3		17,65%
	Apparel	Roupa	8				3	4	1		47,06%
	Second hand clothing	Roupa usada	4	2			2				23,53%
	Footwear	Sapatos	1				1				5,88%
	Fabric	Tecido	0								0,00%
	R - Total	**18,68%**	**17**	2	0	1	6	4	4	0	100%
V	Shipyard	Estaleiro	1				1				20,00%
	Jewelry	Bijuteria	1					1			20,00%
	Photography	Extraccao de fotografias	1			1					20,00%
	Beauty parlor	Salao de beleza	1	1							20,00%
	Phones	Telefones	1				1				20,00%
	V - Total	**5,49%**	**5**	1	0	1	2	1	0	0	100%
N	No info	No information	9	1	0	3		3	1	1	100,00%
	N - Total	**9,89%**	**9**	1	0	3	0	3	1	1	100%
	Total answers	**100,00%**	**91**	29	0	13	32	17	81	1	100%

Annex 14 **Products most affected by the commodity price inflation**

Group	English	Portuguese	Total	Cho	Map	Mas	Max	Vil	Xai	Unk	% per Group
A	Sugar	Acucar	24	2	1	3	3	6	9		12,70%
	Garlic	Alho	1						1		0,53%
	Nuts	Amendoim	6		1			2	3		3,17%
	Rice	Aroz	38	1	1	10	4	8	14		20,11%
	Potatoes	Batatas	6				2	4			3,17%
	Soft drinks, spirits	Bebidas	1						1		0,53%
	Cookies	Biscoite	1			1					0,53%
	Sweets	Bolachas	3					2	1		1,59%
	Brühe	Caldo	4			1		3			2,12%
	Mackerels	Carapao	1						1		0,53%
	Meat	Carne	2						2		1,06%
	Beef	Carne de vaca	1				1				0,53%
	Ognions	Cebolas	6	1			1	3	1		3,17%
	Beer	Cerveja	2	1					1		1,06%
	Cigarets	Cigaros	1			1					0,53%
	Coco nuts	Coco	2				2				1,06%
	Floar	Farinha (milho, trigo)	26	3	2	7	3	7	4		13,76%
	Beans	Feijao	6		1			2	3		3,17%
	Chicken	Frango	2	1			1				1,06%
	Cattle	Gado bovino	1						1		0,53%
	Vegetables	Horticulas	2						2		1,06%
	Creme	Lata	1						1		0,53%
	Milk	Leite	1						1		0,53%
	Apples	Maca	1				1				0,53%
	Butter	Manteiga	1						1		0,53%
	Corn	Milho	3	1					2		1,59%
	Oil	Oleo	25	2	1	7		5	10		13,23%
	Eggs	Ovos	1			1					0,53%
	Groceries	Produtos alimentares	10			1			9		5,29%
	Forage	Racaos	2						2		1,06%
	Soft drinks	Refrescoes	1						1		0,53%
	Tomatoes	Tomate	3				1	2			1,59%
	Wheat	Trigo	3					2	1		1,59%
	Juice	Zumo	1						1		0,53%
	A - Total	**58,33%**	**189**	12	7	32	19	46	73	0	100,00%
C	Building material	Material de construcao	2						2		66,67%
	Small pillars	Pilhas pequenas	1	1							33,33%
	C - Total	**0,93%**	**3**	1	0	0	0	0	2	0	100,00%
H	Antibiotics	Antibioticos	1			1					3,70%
	Pots, sinks, cups	Bassias, Copos, Pratos	4			1			3		14,81%
	Body care products	Cremora	1			1					3,70%
	Lotion	Locao pelo corpo	1			1					3,70%
	Tableware	Loica	2			1			1		7,41%
	Omo	Omo	7			4		2	1		25,93%
	Toothpaste	Pasta dentífrica	1	1							3,70%
	Pflegeprodukte	Produtos de beleza	1	1							3,70%
	Necessities	Produtos de 1er necessidade	4						4		14,81%
	Soap	Sabao	3	1	1			1			11,11%
	Vaseline	Vaselina	1	1							3,70%
	Candles	Velas	1						1		3,70%
	H - Total	**8,33%**	**27**	4	1	9	0	3	10	0	100,00%
M	Wire	Amares	1						1		6,25%
	Spare parts (cars)	Assessorios dos caros	1						1		6,25%
	Coal	Carvao	2			1			1		12,50%
	Gazoline	Combustiveis	1						1		6,25%
	Iron	Ferragem	3					1	2		18,75%
	Timber	Madeira	2						2		12,50%
	Lube oil	Oleo lubrificante	1			1					6,25%
	Petrol	Petroleo	1			1					6,25%
	Nails	Prego	1						1		6,25%
	Charge, planks	Frete, Tabuas	1						1		6,25%
	Glassware	Vidros, Espelhos	2						2		12,50%
	M - Total	**4,94%**	**16**	0	0	3	0	1	12	0	100,00%
R	Blouse	Blusas	4			3			1		9,76%
	Trousers	Calcas	2			1			1		4,88%
	Shirt	Camisetas	1			1					2,44%
	Kapulanas (cloth)	Capulanas	4	1				1	2		9,76%
	Slippers	Chinelos	1			1					2,44%
	Funural fabrics	Fardos de calamidade	1			1					2,44%
	Fabrics for shirts	Fardos de camiseta	1					1			2,44%
	Suits	Fatos	1						1		2,44%
	Wool	Lenha	2						2		4,88%
	Apparel	Roupa	15	2		1		3	9		36,59%
	Children's wear	Roupa de crianca	1						1		2,44%
	Second hand clothing	Roupa usada	2					1	1		4,88%
	Skirts	Saias	3			2			1		7,32%
	Fabrics	Tecido	3					1	2		7,32%
	R - Total	**12,65%**	**41**	3	0	10	0	7	21	0	100,00%
V	Notebooks	Cadernos	1	1							6,67%
	Pencil	Canetas	1	1							6,67%
	Transport	Transporte	13						13		86,67%
	V - Total	**4,63%**	**15**	2	0	0	0	0	13	0	100,00%
N	No information	No info	33	6	0	4	10	2	10	1	100,00%
	N - Total	**10,19%**	**33**	6	0	4	10	2	10	1	100,00%
	Total	**100,00%**	**324**	27	8	58	29	59	141	1	

Annex 15 Clients' perception on AW's services and performance

a – General impression

Office	Excellent	Good	Improvable	Unsufficient	no info	Total
Cho	3	15	2	0	1	21
Map	0	1	0	0	0	1
Mas	16	10	2	2	2	32
Max	1	11	1	3	2	18
Unk	1	0	0	0	0	1
Vil	3	13	2	1	0	19
Xai	4	77	8	0	3	92
Total	28	127	15	6	8	184

Office	Excellent	Good	Improvable	Unsufficient	no info	Total
Cho	14,29%	71,43%	9,52%	0,00%	4,76%	100%
Map	0,00%	100,00%	0,00%	0,00%	0,00%	100%
Mas	50,00%	31,25%	6,25%	6,25%	6,25%	100%
Max	5,56%	61,11%	5,56%	16,67%	11,11%	100%
Unk	100,00%	0,00%	0,00%	0,00%	0,00%	100%
Vil	15,79%	68,42%	10,53%	5,26%	0,00%	100%
Xai	4,35%	83,70%	8,70%	0,00%	3,26%	100%
Total	**15,22%**	**69,02%**	**8,15%**	**3,26%**	**4,35%**	100%

b - Products adequately adapted to the client's needs

Office	Yes	No	No info	Total
Cho	16	2	3	21
Map	1	0	0	1
Mas	30	1	1	32
Max	18	0	0	18
Unk	1	0	0	1
Vil	18	0	1	19
Xai	68	0	24	92
Total	152	3	29	184

Office	Yes (%)	No (%)	No info (%)
Cho	76,19%	9,52%	14,29%
Map	100,00%	0,00%	0,00%
Mas	93,75%	3,13%	3,13%
Max	100,00%	0,00%	0,00%
Unk	100,00%	0,00%	0,00%
Vil	94,74%	0,00%	5,26%
Xai	73,91%	0,00%	26,09%
Total	**82,61%**	**1,63%**	**15,76%**

c - Adequate Loan Volumes

Office	Yes	No	No info	Total
Cho	16	4	1	21
Map	1	0	0	1
Mas	30	2	0	32
Max	17	1	0	18
Unk	0	1	0	1
Vil	18	0	1	19
Xai	83	6	3	92
Total	165	14	5	184

Office	Yes (%)	No (%)	No info (%)
Cho	76,19%	19,05%	4,76%
Map	100,00%	0,00%	0,00%
Mas	93,75%	6,25%	0,00%
Max	94,44%	5,56%	0,00%
Unk	0,00%	100,00%	0,00%
Vil	94,74%	0,00%	5,26%
Xai	90,22%	6,52%	3,26%
Total	89,67%	7,61%	2,72%

d - Repayment modalities - flexible vs. fix terms

Office	Fix	Flexible	No info	Total
Cho	19	1	1	21
Map	1	0	0	1
Mas	20	12	0	32
Max	18	0	0	18
Unk	0	1	0	1
Vil	18	1	0	19
Xai	83	6	3	92
Total	159	21	4	184

Office	Fix (%)	Flexible (%)	No info (%)
Cho	90,48%	4,76%	4,76%
Map	100,00%	0,00%	0,00%
Mas	62,50%	37,50%	0,00%
Max	100,00%	0,00%	0,00%
Unk	0,00%	100,00%	0,00%
Vil	94,74%	5,26%	0,00%
Xai	90,22%	6,52%	3,26%
Total	86,41%	11,41%	2,17%

e - Reasonable interest rates

Office	Yes	No	No info	Total
Cho	16	4	1	21
Map	1	0	0	1
Mas	23	9	0	32
Max	7	11	0	18
Unk	0	1	0	1
Vil	16	2	1	19
Xai	86	3	3	92
Total	149	30	5	184

Office	Yes (%)	No (%)	No info (%)
Cho	76,19%	19,05%	4,76%
Map	100,00%	0,00%	0,00%
Mas	71,88%	28,13%	0,00%
Max	38,89%	61,11%	0,00%
Unk	0,00%	100,00%	0,00%
Vil	84,21%	10,53%	5,26%
Xai	93,48%	3,26%	3,26%
Total	80,98%	16,30%	2,72%

f - Consent concerning the policies of guarantees

Office	Yes	No	No info	Total
Cho	19	1	1	21
Map	1	0	0	1
Mas	32	0	0	32
Max	18	0	0	18
Unk	1	0	0	1
Vil	17	1	1	19
Xai	86	4	2	92
Total	174	6	4	184

Office	Yes (%)	No (%)	No info (%)
Cho	90,48%	4,76%	4,76%
Map	100,00%	0,00%	0,00%
Mas	100,00%	0,00%	0,00%
Max	100,00%	0,00%	0,00%
Unk	100,00%	0,00%	0,00%
Vil	89,47%	5,26%	5,26%
Xai	93,48%	4,35%	2,17%
Total	94,57%	3,26%	2,17%

Annex 16 — Combining the results of the data set (1) and (2)

Category (1)	#	%
C-PA	74	33,64%
C-Q	10	4,55%
C-M	13	5,91%
C-R	28	12,73%
C-O	73	33,18%
P-A	1	0,45%
P-A-C	5	2,27%
P-A-O	2	0,91%
P-O-Ca	1	0,45%
P-O-Co	5	2,27%
P-O-O	8	3,64%
Total	220	100%

Category (2)	#	%
A	29	31,87%
C	6	6,59%
H	11	12,09%
M	14	15,38%
R	17	18,68%
V	5	5,49%
N	9	9,89%
Total	91	100%

Products and services most sold

Alimentation (A)	29	31,87%
Clothing (R)	17	18,68%
Total	46	50,55%

Most frequent business foci

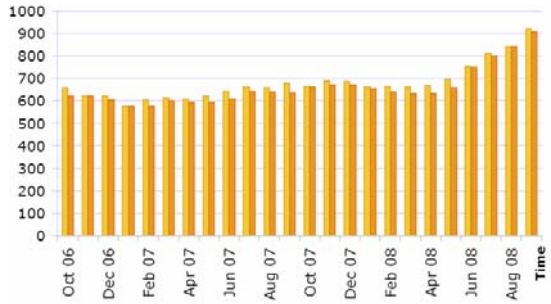
Alimentation (A)	82	37,27%
Clothing (R)	33	15,00%
Total	115	52,27%

C-O, P-A-O, P-O-O ≈ C,H,M,V,N 49,45%

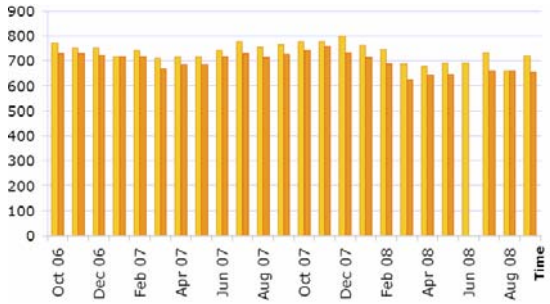
C-O, P-A-O, P-O-O 37.73%

Annex 17 — Active vs. passive clients by region

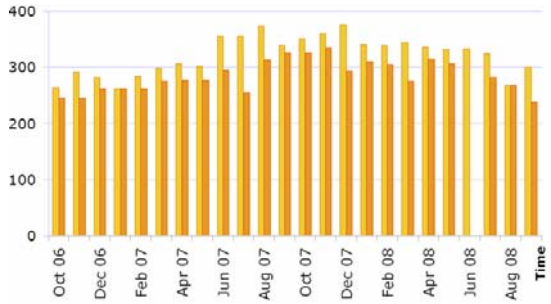
Chokwé



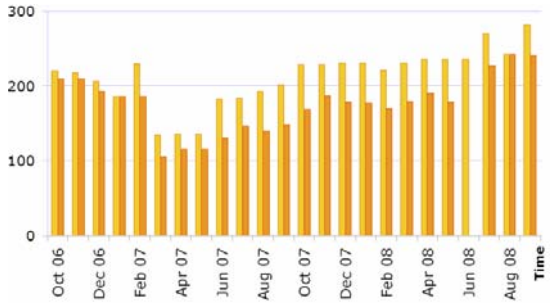
Maxixe



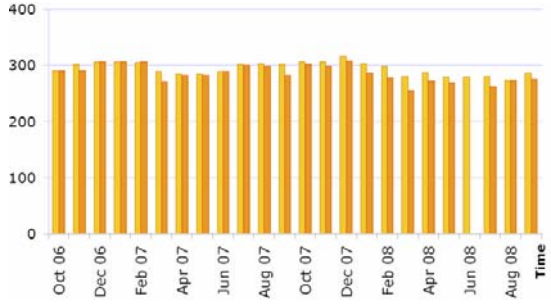
Maputo



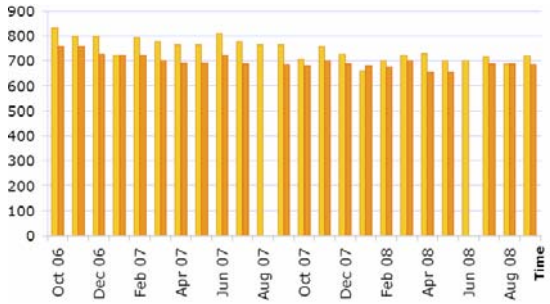
Vilanculos



Massinga



Xai-Xai



Annex 18 **Sample questionnaire – English version**

AfricaWorks

Survey - Evaluation of the institution by the client

Office: *Signature*
Group/Client: _____
Loan Officer: _____

A. Personal Data

Name of the beneficiary:		Date of Birth:
Home address:		Gender: ☐ F ☐ M
Business address		Literacy:
Already client of FCC? ☐ Yes ☐ No	Since when?:	Client ID:
How many are living in the household?:	How many are working?:	How many have their own business?:

B. Entrepreneurial Details

Type of Business	☐ Retail	☐ Alimentation ☐ Kiosk / Various ☐ Small Supermarket ☐ Clothing / Apparel ☐ Other	☐ Production	☐ Alimentation ☐ Foodstuff ☐ Chicken breeding ☐ Other ☐ Handycraft ☐ Carpenter ☐ Tailor ☐ Other

C. Impact of Inflation

1) In case of "Retail": Has the business deteriorated due to increased (alimentation) prices? Profit losses? ☐ Yes ☐ No

Most affected products?

Are consumers buying less?	☐ Yes ☐ No	If so, close to? _____ (percentage)
Has the client reduced his/her stockkeeping?	☐ Yes ☐ No	If so, close to? _____ (percentage)
Have wholesale prices increased?	☐ Yes ☐ No	If so, close to? _____ (percentage)

2) In case of "Production ": Has the producer suffered adverse effects from increased prices? / Profit losses? ☐ Yes ☐ No

Most affected products?

Are consumers buying less?	☐ Yes ☐ No	If so, close to? _____ (percentage)
Has the client reduced his/her stockkeeping?	☐ Yes ☐ No	If so, close to? _____ (percentage)
Have costs of production increased?	☐ Yes ☐ No	If so, close to? _____ (percentage)

Annotations / comment:

D. Client experience

General Impression ☐ Excellent ☐ Good ☐ Improvable ☐ Insufficient

What could be improved?

Are the products sufficiently adapted to the client's needs? ☐ Yes ☐ No

Assortment of MF products

Preferred MF product ☐ S (Solidarity) ☐ C (Communitarian) ☐ E (Special) ☐ I (Individuals)

Loan volumes?	☐ Yes	☐ No	Why / Comment:
Repayment modalities			
Payment terms?	☐ fix	☐ flexible	Why / Comment:
Interest rates?	☐ Yes	☐ No	Why / Comment:
Guarantees? (monetary and physical)	☐ Yes	☐ No	Why / Comment:
Other loan scheduled?	☐ Yes	☐ No	Comment:

Does the client have experience with other MFIs? ☐ Yes ☐ No If so, which o

Annotations / comment:

References

ACCIÓN (2008), "ACCIÓN Products & Services – Credit Methodology", Boston: ACCIÓN, www.accion.org/Page.aspx?pid=820, last accessed: 6.11.2008.

AfricaWorks (2007), "Business Plan 2008 – 2010", Maputo: AfricaWorks (AW).

AfricaWorks (2008a), "Manual das Operções", Maputo: AfricaWorks.

AfricaWorks (2008b), "Support Programme to Farmers' Associations", European Commission Grant Application, Maputo: AfricaWorks (AW).

Banco de Moçambique (2009), Câmbios/Exchange Rate: 09/01/2009", Maputo: Banco de Moçambique, http://www.bancomoc.mz//index.php?menu=1&lang=uk, last accessed: 9.01.2009.

Basu, A./Blavy,R./Yulek, M. (2004), "Microfinance in Africa: Experience and lessons from selected African countries", IMF Working Paper,WP/04/174, Washington DC: International Monetary Fund (IMF).

BCI (2004), "Orhei Economic Growth Area", Chisinau: Business Consulting Institute (BCI).

Boúúaert, M. (2008), "A Billion to Gain? A study on global financial institutions and microfinance – The Next Phase", Frankfurt am MAIN: (ING).

CGAP (2005), "CGAP Case Studies in Agricultural Microfinance: An Overview", CGAP Agricultural Microfinance, Case Study Nr.1, Washington DC: Consultative Group to Assist the Poor – World Bank Group.

CGAP (2008), "Number of Borrowers", Washington DC: Consultative Group to Assist the Poor – World Bank Group, http://www.cgap.org/p/site/c/template.rc/1.11.1792, first viewed: 18.06.2008.

Chipika, J. (2007), "Report on the Progress and Prospects for the Attainment of Millennium Development Goals (MDGs) in Southern Africa", Progress Report, ECA/SA/TPUB/MDGs/2007/3, Addis Ababa: United Nations Economic Commission for Africa (ECA).

Dessus, S./Herrera, S./de Hoyos, R. (2008), "The Impact of Food Inflation on Urban Poverty and Its Monetary Cost: Some Back-of-the-Envelope Calculations", Working Paper 4666, Washington DC: World Bank (WB).

Dieckmann, R. (2007), "Microfinance: An emerging investment opportunity", Current Issues, Dec 2007, Frankfurt am Main: Deutsch Bank Research.

Döge, C.L.M./Neven, D. (2000), "A Diamond for the Poor? Assessing Porter's Diamond Model for the Analysis of Agro-Food Clusters in the Developing Countries", Michigan: Michigan State University.

FAO (2008), "Soaring Food Prices: Facts, Perspectives, Impacts and Actions required", High-Level Conference Note on World Food Security, HLC/08/INF/1, Rome, Food and Agriculture Organization of the United Nations (FAO).

Gibbons, D. S./Meehan, J. W. (2000), "D. S. Gibbons et al., The Microcredit Summit's Challenge: Working Towards Institutional, Financial Self-Sufficiency while Maintaining a Commitment to Serving the Poorest Families", Councils Plenary Papers, Washington DC: Microcredit Summit Campaign.

Goldberg, N. (2005), "Measuring the Impact of Microfinance: Taking Stock of What we know", Grameen Foundation USA Publication Series, Washington DC: Grameen Foundation USA.

Grameen Bank (2008), "A Short History of Grameen Bank", Dhaka: Grameen Bank, http://www.grameen-info.org/index.php?option=com_content&task=view&id=19&Itemid=114, last accessed 28.09.2008.

IFAD (2001), "Rural Finance for the Poor – From unsustainable Projects to sustainable Institutions", Rome: International Food Policy Research Institute (IFAD).

IFAD (2008a), "Food prices - Smallholders can be part of the solution", Rome: International Food Policy Research Institute (IFAD).

IFAD (2008b), "High food prices: Impact and recommendation", Rome: International Food Policy Research Institute (IFAD), http://www.ifad.org/operations/food/ceb.htm, last accessed: 23.08.2008.

IfW (2008), "AIECE Working Group on Commodity Prices: Strong Decline in Raw Material Prices", IfW Press release November 18, 2008, Kiel: Institut für Weltwirtschaft, http://www.ifw-kiel.de/press/press-releases/2008/pr18-11-08, last accessed 19/12/2008.

IRIN (2008), "Let them eat subsidies?", http://www.irinnews.org/report.aspx?ReportID=77646, last accessed: 16.06.2008.

Ivanic, M./Martin,W. (2008), "Implications of Higher Global Food Prices for Poverty in Low-Income Countries", Working Paper 4594, Washington DC: World Bank (WB).

Kalibwani, F. (2005), "Food Security in Southern Africa: Current Status, Key Policy Processes and Key Players at Regional Level", New York: United Nations (UN).

Karuri, M.W. et al (2003), "Rural Finance Intermediation Support Project – Appraisal Report", Abidjan: African Development Bank (AfDB).

Ki-moon, B. (2008), "The new face of hunger", UN Secretary General Statement, New York: United Nations (UN), http://www.un.org/sg/articleFull.asp?TID=73&Type=Op-Ed, last accessed: 16.07.2008.

Lafourcade, A.-L. et al (2005), "Overview of the Outreach and Financial Performance of Microfinance Institutions in Africa", Washington DC: MIX.

Maponga, O./ Mastaki Namegabe, J. L./ Mutangadura, G. (2007), "Impact of Food Aid and Developed Countries' Agricultural Subsidies on Long-Term Sustainability of Food Security in Southern Africa", Progress Report, ECA/SA/FOODAID/2007/1, Addis Ababa: United Nations Economic Commission for Africa (ECA).

Nagarajan, G. (2001), "Looking into Gift Horse's Mouth: Implications of Cash Grants for Disaster Response by Microfinance Institutions in Mozambique".

No author (2008a), Principles of microfinance and microcredit: Microfinance products", http://www.microfinanceinfo.com/microfinance-products/, last accessed: 26.12.2008.

No author (2008b), Oil Price, Today and Tomorrow, http://oil-price.net/dashboard.php?lang=en, viewed: 16.07.2008.

O'Boyle, E.J. (1998), "Transitions into and out of poverty", in: International Journal of Social Economics, Vol. 25, No. 9, pp. 1411-1424.

odi (2008), "Rising food prices: A global crisis", in: Briefing Paper, No.37, London: Overseas Development Institute (odi).

OECD – AfDB (2008), "African Economic Outlook 2008", Chapter – Mozambique, Paris: Organisation for Economic Co-operation and Development, Abidjan: African Development Bank.

OECD - FAO (2008), "Agricultural Outlook 2008-2017", Rome: Food and Agriculture Organization of the United Nations (FAO), Paris: Organisation for Economic Co-operation and Development (OECD).

Pomeroy, R. (2008), "Food crisis has changed game on beating poverty: U.N.", Rome: Reuters, http://www.reuters.com/article/newsOne/idUSL2742588920080527?sp=true, last accessed: 18.01.2009.

Porter, M. E. (1998a), Competitive Strategy - Techniques for Analysing Industries and Competitors, New York: The Free Press.

Porter, M. E. (1998b), Competitive Advantage. Creating and Sustaining Superior Performance, New York: The Free Press.

Rahman, S. H. et al (2008), "Soaring Food Prices – Response to the Crisis", Publication Stock No. 041908, Manila: Asian Development Bank (ADB).

Robinson, M.S. (2001), "The Microfinance Revolution", Washington DC: World Bank (WB), International Bank for Reconstruction and Development (IBRD).

Rohler, M. (2008), "Experience and lessons learned as a consultant in Mozambique – Coordinating institutional transformations for the case of SOCREMO", Berlin: LFS, 7.10.2008.

Sachs, J.D et al (2004), "Ending Africa's Poverty Trap", in: Brookings Paper on Economic Activity, Vol. 2004, No. 1, pp.117-240.

Seibel, H. D. (2003), "History matters in microfinance", in: Small Enterprise Development – An International Journal of Microfinance and Business Development, Vol. 14, No. 2, pp.10-12.

TheMIXMarket – BOM (2008), "BOM - Banco Oportunidade de Moçambique", General institutional information and legal data, Washington DC: MIX, http://www.mixmarket.org/en/demand/demand.show.profile.asp?ett=1814& viewed: 13.01.2009.

TheMIXMarket – NovoBanco (2008), "NovoBanco - MOZ", General institutional information and legal data, Washington DC: MIX, http://www.mixmarket.org/en/demand/demand.show.profile.asp?ett=113& viewed: 13.01.2009.

TheMIXMarket – SOCREMO (2008), "SOCREMO", General institutional information and legal data, Washington DC: MIX, http://www.mixmarket.org/en/demand/demand.show.profile.asp?ett=844& viewed: 13.01.2009.

TheMIXMarket (2008), "Fundo de Credito Comunitario", General institutional information and legal data, Washington DC: MIX, http://www.mixmarket.org/en/demand/demand.print.profile.asp?ett=758, last accessed: 13.01.2009.

UNECA (2008), "Economic Report on Africa 2008", Progress Report, Addis Ababa: UN Economic Commission for Africa (UNECA).

United Nations (2001a), "Poverty and the International Covenant on Economic, Social and Cultural Rights", Statement, Geneva: United Nations Committee on Economic, Social and Cultural Rights (UNCESCR), http://www.unhchr.ch/tbs/doc.nsf/(Symbol)/E.C.12.2001.10.En, last accessed: 11.01.2009.

United Nations (2001b), "Microfinance in Africa: Combining the Best Practices of Traditional and Modern Microfinance Approaches towards Poverty Eradication", New York: United Nations (UN), http://www.un.org/esa/africa/microfinanceinafrica.pdf, last accessed 10.01.2000.

United Nations (2005), "International Year of Microcredit 2005 – Why a Year? – About Microfinance and Microcredit", New York: United Nations Capital Development Fund (UNCDF), http://www.yearofmicrocredit.org/pages/whyayear/whyayear_aboutmicrofinance.asp, last accessed 4.01.2009.

United Nations (2007), "Africa and the Millennium Development Goals", Update 2007, DPI/2458, New York: United Nations (UN).

von Braun, J. (2007), "The World Food Situation – New Driving Forces and Required Actions", in: Food Policy Report, No.18, Washington DC: International Food Policy Research Institute (IFPRI).

von Braun, J. (2008a), "Food prices, Biofuels, and Climate Change", presentation, Washington DC: International Food Policy Research Institute (IFPRI).

von Braun, J. (2008b), "High Food Prices: The What, Who and How of Proposed Policy Action", in: Policy Brief, May 2008, Washington DC: International Food Policy Research Institute (IFPRI).

WFP (2008), "WFP's Response to Global Food Crisis", Rome: United Nations World Food Programme (WFP).

World Bank (2008a), "Rising food prices: Policy options and World Bank response", background note to the Development Committee Meeting, Washington DC: World Bank (WB).

World Bank (2008b), "Understanding Poverty", Washington DC: World Bank, http://go.worldbank.org/K7LWQUT9L0, last accessed: 14.12.2008.

World Relief (2007), "World Relief Mozambique – 2007 Annual Report", Baltimore: World Relief (WR).

World Relief (2008), "Mission, Vision and Values", Baltimore: World Relief (WR), https://www.wr.org/aboutus/vision.asp, last accessed: 12.01.2009.

Eidesstattliche Erklärung

Ich erkläre hiermit an Eides Statt, dass ich die vorliegende Arbeit selbständig und ohne unerlaubte fremde Hilfe angefertigt, andere als die angegebenen Quellen und Hilfsmittel nicht benutzt habe. Die aus fremden Quellen direkt oder indirekt übernommenen Stellen sind als solche kenntlich gemacht.

Die Arbeit wurde bisher in gleicher oder ähnlicher Form keiner anderen Prüfungsbehörde vorgelegt und auch nicht veröffentlicht.

Ort **Datum**