



Front left to right: Mr Mmatlou Kalaba, Prof Tessa Marcus, Prof Sheryl Hendriks, Dr Friede Wenhold, Prof Liesel Ebersohn and Dr Michael van der Laan
Back: Prof John Annandale, Mr Jacques van Rooyen, Dr Annemarie Viljoen and Prof Johann Kirsten



Strategic planning and policy reform to manage food security risks

Decision-makers across Africa require strategic, evidence-based information on food security and nutrition. This will enable them to take vital decision which will have an impact on the lives of communities and contribute to the global efforts to combat hunger and poverty. The research conducted by the IFNuW contributes to evidence and knowledge.

Achieving food security in Africa requires a delicate balance of policies, strategies and programmes based on empirical evidence and best practice. Quite often, governments and multinational development agencies have to weigh up the competing interests of producers, consumers and vulnerable communities to develop an appropriate and sustainable framework.

The ultimate objective is to achieve food security – a situation defined by the World Food Summit in which “all people at all times have access to sufficient, safe, nutritious food to maintain a healthy and active life.”

This is a complex development issue – touching not only on the health of communities but also on sustainable economic development, the environment and trade.

On the continent of Africa, the Comprehensive Africa Agriculture Development Programme (CAADP) provides a framework to achieve these goals but considerable policy support is needed in-country and across the Regional Economic Commissions.

However, empirically-based evidence to influence policy reform is lacking and monitoring and evaluation systems are still based on agronomic and food balance systems. These ignore the need to understand the impact of policies and programmes on intended beneficiaries and the requirements for comprehensive monitoring and evaluation of the multiple facets of food security.

In line with emerging international interest on food security policy, the aim of research conducted through Theme E is to provide strategic evidence-based guidance on food security and the nutrition impact of national and regional policies. This will enable decision-makers to reflect, disseminate and learn from best practice and influence policy reform and strategic planning in Africa.

Affecting the lives of millions

Understanding who and where the hungry and food insecure are and identifying appropriate policy instruments to manage and promote household food security and sustainable livelihoods will have a powerful impact on the African transformation agenda and affect the lives of millions of households who face food insecurity risks.

International research focuses increasingly on the issues of price volatility and the transmission of price hikes to consumers. Very little is understood regarding the drivers of volatility and the impact on rural households and

smallholders. While higher prices are good news for farmers, reduced purchasing power has an impact on consumption behaviour among consumers and ultimately affects health and well-being.

There is a great deal of international attention on the development of agricultural value chains, but not enough thought has been put into how such development can contribute to much needed broad-based development, bring the most poor into the growth agenda and address crucial nutrition problems.

Simple adjustments of the product mix – the identification of non-farm opportunities; the protection and preservation of nutrients through processing; exploring alternative market channels and collective marketing opportunities – can provide gender-sensitive, pro-poor growth opportunities to the most vulnerable and marginalised members of society.

Meeting the needs of the poor

The promotion of nutrition-sensitive value chain development can bring significant health benefits to children and other vulnerable groups – pregnant mothers, the elderly and the ill – with special nutritional requirements.

Social protection is a crucial tool to meet the needs of the most poor and vulnerable. Carefully designed programmes can provide the essentials for survival to communities at risk and, thus, reduce the burden on the state for emergency and crisis responses and help to mitigate hunger and poverty. Social protection programmes that provide transfers – food, cash or assets such as livestock – provide for those in need, protect vulnerable households and promote sustainable livelihoods.

However, very little is known regarding the most appropriate options and models for efficient investment in social protection programmes which can also contribute to social stability and reduce the reliance on international aid.

The research conducted by the IFNuW will provide decision-makers with the necessary information and evidence to enable them to make informed choices and advance the cause of food security in Africa.

Theme Leader:

Prof Sheryl Hendriks – see profile on page 12

Project 1: Feed the Future Innovation Lab for Food Security Policy

Stimulating growth in agriculture has proven to be an effective way to reduce poverty and increase food security in Sub-Saharan Africa and Asia. However, this sector was neglected in many government and donor investment portfolios over a 25-year period.

To address and correct this neglect, heads of state in Africa formed the Comprehensive Africa Agriculture Development Programme (CAADP) as a shared framework to achieve sustained public expenditure in support of agricultural growth and poverty reduction. Governments in Asia have adopted similar approaches at country level, with coordination on food security and agricultural trade through the Association of Southeast Asian Nations (ASEAN).

Increased investment in agriculture alone will not be sufficient to address existing development challenges. Governments that champion CAADP programs, as well as development partners such as USAID, recognise that increased public investment must be accompanied by better policies and a more conducive policy environment.

In the absence of effective policies, the private sector, from smallholder farmers to multi-national agribusiness firms, will not have adequate incentives to make their own investments, undermining the impact and rationale for public investments in agriculture. Indeed, ineffective policies can sometimes discourage private investment and have the opposite effect to that intended by policymakers.

Using science and technology

The lack of engagement with private sector and other non-government stakeholders in policy debates and policy formation is increasingly recognised to be a key constraint on the impact of public investment programmes.

Shortly after the conclusion of US President, Barack Obama's June 2013 visit to three African countries – including South Africa – the US Agency for International Development (USAID) announced the launch of two new “Feed the Future Innovation Labs”. USAID administrator, Rajiv Shah, said this initiative reflected Pres Obama's strong focus on using science and technology to help smallholders meet the challenge of increasing cereal production – even as climate change alters environmental conditions and reduces agricultural productivity.

The Feed the Future Innovation Lab for Food Security Policy is led by a consortium including Michigan State University, the International Food Policy Research Institute and the University of Pretoria. This initiative will help increase partner countries' capacity to identify and implement improved food security policies that can help facilitate greater food security and nutrition.

This Innovation Lab will work with and support a wide range of governments, local think tanks, university researchers, private sector associations and civil society groups in building capacity and providing critical information to inform better food, agriculture and nutrition policies.

Improve policy implementation

The overall goals of the FSP program are to promote inclusive agricultural productivity growth, improved nutritional outcomes, and enhanced livelihood resilience through improved policy environments. This will be

achieved through increased in-country capacity to generate policy-relevant evidence and analysis used by stakeholders to improve policy formulation and implementation.

The FSP focus will be on two integrated objectives:

- Address critical evidence gaps for informed policy debate and formulation at country, regional and global levels;
- Foster credible, inclusive, transparent and sustainable policy processes at country level.

The project provides an exciting opportunity to mobilise institutional research experience through a global partnership. This is a major opportunity for the Institute of Food, Nutrition and Well-being to participate in a global research programme with well-established partners offering a wealth of knowledge and experience. It will provide valuable opportunities for postgraduate students and significantly raise the profile of both the IFNuW and the University of Pretoria.

Participating institutions, partners and team members:

The USAID Feed the Future Innovation Lab for Food Security Policy was awarded to a consortium comprised of Michigan State University (MSU), the International Food Policy Research Institute (IFPRI) and the University of Pretoria. The overall Project leader is Prof Duncan Boughton from Michigan State University's Food Security Group.

The UP team is led by Prof Sheryl Hendriks and consists of:

- Prof Ferdi Meyer – Department of Agricultural Economics, Extension and Rural Development (UP Faculty of Natural and Agricultural Sciences);
- Prof Lorenzo Floramonti – Department of Political Science (UP Faculty of Humanities);
- Prof Coleen Vogel – Department of Geography, (UP Faculty of Natural and Agricultural Sciences);
- Dr Marnus Gouse – Department of Agricultural Economics, Extension and Rural Development (UP Faculty of Natural and Agricultural Sciences);
- Ms Angela McIntyre – Research Assistant, IFNuW



Project 2: Food insecurity information systems

In health you cannot treat what you cannot diagnose. This is as true for disease as it is for hunger and food insecurity. Without accurate and robust measures that identify hunger and food insecurity, there is no hope of addressing the misery they cause. Nor is it possible to know if the actions taken to address them have their intended impacts.

The 2015 Millennium Development Goals (MDG1) requires the reduction by half of the 1996 levels of both poverty and hunger. Current estimates show that only 12 of 53 African countries are likely to achieve the MDG1 poverty targets by 2015 and 13 are likely to achieve the hunger target. Ghana, which achieved both by 2011, is likely to remain the only country on the continent to reach this.

Internationally, the universal measurement of poverty is per capita, per day income in purchase parity terms. To date, an equivalent consensus measure for food insecurity has not been developed despite two decades of research. The absence of an agreed scientific approach to measure the complicated and complex state of food insecurity and deprivation is a major constraint on efforts to combat hunger.

In South Africa, our understanding of food insecurity and poverty is compromised by outdated data. The 2010 South African MDG Report is based on 2006 poverty and 2005 nutrition-related data. These statistics are too far removed from current realities.

Moreover, they do not reflect the cyclical nature of hunger and deprivation that constrains human and economic development and traps at least a quarter of South African children in underdevelopment and poverty. Public resources cannot be optimally directed because the depth, breadth and severity of food insecurity are poorly understood.

Monitoring the impact

This research project seeks to address this problem by creating nationally representative, time-series data against which it will be possible to monitor and evaluate the impact of food security and hunger alleviation programmes and policies at the district, provincial, national, regional and international levels.

The purpose of this study is to develop a set of empirical measures for food insecurity, determine cut-off values for differentiating between classes of severity of food insecurity and develop a pilot score card to measure and monitor food insecurity. The specific aims are:

- Identify concise measures for food insecurity that can be monitored continuously and, through periodic national surveys, provide up-to-date and accurate information on the state of food insecurity in South Africa;
- Develop a food security score card for monitoring food insecurity over time;
- Determine cut-off values for differentiating between classes of severity of food insecurity;
- Test the accuracy of the score card and its component measures against existing databases for accuracy;
- Establish a panel database in at least one community to evaluate the score card and develop a 'dashboard' that demonstrates the trends among the score card indicators over time.



The project will create a real-time food security information system that monitors changes in levels of food security and enables timely, actionable reporting.

International significance

A highlight of work to date is the development of a real time digital survey tool using indicators identified through the project. The tool has been operationalised in Jozini, in KwaZulu-Natal where it is linked to the survey for the Water Research Commission project profiled on page 99. It is being tested in the Department of Family Health's Community- Oriented Primary Health Care Programme (profiled on page 109).

Project researchers have also engaged with StatsSA to participate in the review of the General Household Survey and the development of a Continuous Population Survey. Initial research results were presented at the 5th Joint Ministers Meeting on Agriculture Environment and Natural Resources organised by the Common Market for Eastern and Southern Africa (Comesa) in Addis Ababa in September 2013. An invited paper based on the initial assessment of continental food security assessment has been published in the *European Journal of Development Research*.

The project contributes to the Institutional Research Themes in two important ways. One is through the development of indicators to measure food security. The other is to find a way of measuring the real time impact of programmes and policies that address food

insecurity. Both contributions are of national, regional, and international significance and will inform post-MDG discussions and African development.

Project leader

- Prof Sheryl Hendriks – **see profile on page 12**

Team members:

- Prof Jannie Hugo – Department of Family Medicine (UP Faculty of Health Sciences);
- Prof Tessa Marcus – Department of Family Medicine (UP Faculty of Health Sciences);
- Dr Friede Wenhold – Department of Human Nutrition (UP Faculty of Health Sciences).

Students funded by and working on the project:

- Mr Christopher Manyamba;
- Ms Maria Molokomme;
- Mr Corné van der Merwe.

Project partners:

- The National Research Foundation's competitive programme for rated researchers.

From left to right: Dr Mjabuliseni Ngidi, Mr Mmatlou Kalaba, Ms Maria Molokomme, Prof Sheryl Hendriks and Mr Chris Manyamba



Project 3: Bureau for Food and Agricultural Policy

The Bureau for Food and Agricultural Policy (BFAP) has become a valuable resource to the agro-industrial sector by providing analyses of future policy and market scenarios and measuring their impact on farm and firm profitability.

Founded in 2004, the BFAP has offices at the University of Pretoria, the University of Stellenbosch, and the Western Cape Department of Agriculture. It is made up of 37 public- and private sector researchers, analysts and experts who pool their knowledge and research to inform policy and decision-making within South Africa's food system.

The BFAP is a multidisciplinary and inter-institutional platform collaborating with the Food and Agricultural Policy Research Institute (FAPRI) and the University of Missouri, the Food and Agricultural Organisation (FAO), the Thünen Institute in Braunschweig, Germany, and is part of the newly established Regional Network of Agricultural Policy Research Institutes (ReNAPRI).

Over the past ten years the BFAP has developed a number of tools and systems to analyse agricultural commodity markets, looking at the sustainability of farming systems, unpacking food value chains and understanding consumer behaviour. Addressing the impact on consumption is an often neglected element of food price analysis.

Future scenarios

The Bureau has been tracking South African commodity prices. The framework is based on the global data feeding into the South African situation – looking at supply and demand balances and farm sustainability. The typical analyses look at price trends, shocks and future outlooks. The Bureau generates future scenarios of the production and consumption of food under various macro and policy assumptions and projects commodity and food price inflation, taking price transmission and market integration into consideration.

For the past ten years the BFAP has published the South African Agricultural Baseline where a 10-year outlook is provided for 44 agricultural commodities and the consequent impact of the outlook on farm profitability and household food affordability is indicated.

Apart from the Baseline, the BFAP has a further range of standardised products that are published on a regular basis, for example the contributions to the quarterly Food Price Monitor published by the National Agricultural Marketing Council (NAMC). BFAP researchers keep track of the impact of food price inflation on household food expenditure patterns and provide a quarterly outlook of food price inflation.

The BFAP also undertakes independent research projects. Over the past ten years, more than thirty research reports have been compiled and published. The most recent reports were conducted for the National Planning Commission and focused on employment in agriculture and a sectoral analysis of minimum wages. The BFAP developed an employment matrix for the agricultural industry that was included in the National Development Plan 2030. Other recent research was conducted on the impact of the proposed National Water Resource Strategy on job creation and household food security in a pilot irrigation region in Mpumalanga.

Since its inception, 14 master's and five PhD degrees have been completed under BFAP, which has led to the publication of a range of articles in journals and other literature. BFAP researchers have delivered 92 presentations at a range of national and international conferences and workshops, either by means of an invitation or through a peer reviewed process.



Strong partnerships

The Bureau consults to both private sector local and international companies as well as the national government. Long-standing partnerships have been formed with institutions such as the National Agricultural Marketing Council (NAMC), ABSA and SAB Miller. It is the BFAP's vision to expand the analysis into African countries through the newly established Regional Network of Agricultural Policy Research Institutes (ReNAPRI).

Through a partnership with the Bureau, the Institutional Research Theme that focuses on food security and nutritional impacts of policies and programmes has access to a comprehensive system of models and economic intelligence that is unique in the South African context and has a 10-year track record. It is the only system that has the ability to undertake simultaneous quantitative impact analysis of external shocks on farm, sector and consumer levels and also has the ability to generate a set of plausible future scenarios of the South African food system taking risk and uncertainty into consideration.

Project leader

Prof Ferdinand Meyer holds the position as director of the Bureau for Food and Agricultural Policy (BFAP) and associate professor in the Department of Agricultural Economics, Extension and Rural Development at the University of Pretoria. He has served on the National Crop Estimates Committee and is a Board Member of the Protein Research Foundation (PRF) and the Regional network of Agricultural Policy Research Institutes (ReNAPRI). He holds a rating as

From left to right: xxx



young researcher from the National Research Foundation (NRF); 14 masters' and 4 doctoral students have graduated under his supervision, and under BFAP he has led 35 research reports and delivered 74 national and international presentations at conferences as invited speaker.

His field of interest relevant to the IRT includes developing future scenarios for agricultural markets and food systems through econometric modelling and scenario thinking techniques. Future scenarios highlight future supply, demand, trade and price patterns under a range of assumptions. The co-integration of various key drivers in the value supply chains is analysed and the impact on price risk and volatility measured.

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Project 4: Current rain-fed and irrigated production of food crops and its potential to meet all year round nutritional requirements of rural poor people in North West, Limpopo, KwaZulu-Natal and Eastern Cape provinces

An earlier study by the Water Research Commission (WRC) revealed numerous knowledge gaps with regard to smallholder production and food security in South Africa. It highlighted the fact that there is limited current and generalisable food and nutrition research conducted in the country. (WRC Project K5/1954/4 and published WRC report number TT 537/12)

Very few studies have investigated the sources of food of the rural poor across seasons. Of particular concern is the absence of particular, nutrition-sensitive agricultural interventions – in which water forms the link between the agricultural practices and nutrition. This has an impact on eventual outcomes of health, education and economics.

The two primary knowledge gaps that were identified and which are relevant to this study are:

- What is the contribution of home / smallholder grown foods to total dietary intake and nutritional requirements?
- What is the effect of seasonality on home / smallholder production and resultant food intake?

Efficient use of water

The study addresses a significant and longstanding gap in knowledge on this topic with the intention to propose a set of options which

can strengthen rain-fed and irrigated production in rural areas. The more efficient use of water can overcome dietary inadequacies and lead to better nutrition of rural household members.

It will determine what agricultural production is possible under rain-fed and irrigated conditions that will contribute to household food security in rural areas of South Africa. The team takes into account household consumption needs, production and the area required to produce sufficient crops in the specific location to meet the year-round consumption requirements of rural households.

A desk study was conducted to carefully select the most food insecure areas in the identified provinces. The first survey was done in the community of Jozini in KwaZulu-Natal. The initial findings show that rural diets in Jozini are mostly traditional but very few wild foods are consumed. Hunger is not widely experienced by the majority of households except during certain months of the year that coincide with periods of very low agricultural activity.



The results raise concerns over the quality of diets consumed by the households in terms of variety and nutritional quality.

Solving real issues

The study contributes directly to the IRT goals and purpose, providing opportunities for student bursaries, research training and an opportunity to bring experts from Nutrition, Plant Production and Agricultural Economics together to solve a real issue identified by the WRC.

The study has the potential to produce a report which details the type of crops and production systems that should be further researched for its potential to provide adequate diets for the rural poor in terms of their water use, yield and good management practices.

Project leader

- Prof Sheryl Hendriks – **see profile on page 12**

Team members:

- Dr Friede Wenhold, Department of Human Nutrition (UP Faculty of Health Science);
- Dr Annemarie Viljoen, Department of Consumer Science (UP Faculty of Natural and Agricultural Sciences);
- Mr Mmatlou Kalaba, Department of Agricultural Economics, Rural Development

- and Agricultural Extension (UP Faculty of Natural and Agricultural Sciences);
- Prof John Annandale, Department of Plant Production and Soil Science; (UP Faculty of Natural and Agricultural and Sciences);
- Mr Duncan Stewart, LIMA Rural Development Foundation;
- Ms Makhosazana Dlamini, LIMA Rural Development Foundation.

Students funded by and working on the project:

- Dr Mjabuliseni Ngidi (Postdoctoral fellow),
- Mr Christopher Manyamba (PhD candidate),
- Ms Angela McIntyre (PhD candidate),
- Ms Maria Molokomme (master's candidate),
- Ms Grace Timanyechi Munthali (master's candidate)
- Mr Corné van der Merwe (honours candidate)

Project partners:

- Water Research Commission of South Africa;
- Department of Water Affairs, Forestry and Fisheries.

From left to right: Dr Mjabuliseni Ngidi, Prof John Annandale, Dr Annemarie Viljoen, Mr Corné van der Merwe, Ms Maria Molokomme, Ms Angela McIntyre, Dr Friede Wenhold, Prof Sheryl Hendriks, Ms Grace Tima Munthali and Mr Mmatlou Kalaba



Project 5: Support to the Department of Agriculture, Forestry and Fisheries on the Comprehensive African Agricultural Development Programme (CAADP)

In 2003, African Heads of State and Government signed the Maputo Declaration, committing the continent to accelerate agricultural growth and poverty reduction to ensure food security in Africa. The framework for this growth is the Comprehensive African Agricultural Development Programme (CAADP).

The CAADP agenda asks African governments to adopt policies and programmes and raise investments to achieve a growth rate of 6%, and a budget share of 10%, for the agricultural sector. This should be implemented through country-led comprehensive development programmes that seek to:

- attain food security;
- improve agricultural productivity to attain a 6% annual agricultural growth rate;
- develop dynamic regional and sub-regional agricultural markets;
- integrate farmers into a market economy; and
- achieve a more equitable distribution of wealth by 2015

The objectives of the project are to facilitate a national process of stocktaking, consultation and analysis to produce a South African National Agriculture and Food Security Investment Plan under the CAADP.

Accelerated agriculture growth

The University of Pretoria was asked to support the seven-step process required to develop a nationally-owned CAADP Compact. This sets

out the priority programmes for the country, the CAADP targets and a national investment plan that aligns national programmes and commits government and its partners to accelerated agricultural growth and poverty reduction.

The process includes:

- identifying constraints to agricultural growth and food security in the country;
- estimating the magnitude of change required to meet the CAADP targets;
- creating an inventory of options for government to consider;
- prioritising these interventions;
- packaging them as a programme with clear implementation mechanisms and targets; and
- gaining support from the in-country and international development community in implementation.

The UP team worked closely with the National CAADP Focal Person, Mrs Noncedo Vutula, and the DAFF team to design a unique provincial consultation process to identify the constraints, opportunities and priorities for agricultural growth and poverty reduction in the provinces.



A productive meeting was held with private sector representatives as well as a workshop at the annual Agricultural Economics Association of Southern Africa conference. These consultations have produced a rich picture of the context of agriculture and food security in the provinces and contribute to the building of a matrix of priorities to consider in the design of the South African Compact and Investment Plan. Simultaneously, an analysis of various aspects of the South African agriculture and food systems is being conducted including reviews of policies, programmes and trends.

The provincial workshops were exciting opportunities to build an understanding of the realities on the ground for many people in South Africa. The active participation of small farmers, cooperative groups and women's organisations has been a real highlight. A farmer from Limpopo stated: *"Never have I seen or attended such a workshop and seen the seriousness of the government in trying to help farmers"*.

A farmer from the Eastern Cape commented: *"I am seeing for the first time farmers participating in government processes. In such meetings, there are usually quarrels and disagreements. But here there was agreement between officials and farmers!"*

The process is closely observed by the international development community as it is a unique approach to ensure a bottom-up and nationally owned development process.

The opportunity to support DAFF in the identification of key priorities to stimulate economic growth and ensure food security is an excellent example of the trans-disciplinary nature of the IFNuW's work.

Building a clearer picture

Each provincial consultation builds a clearer picture of the realities on the ground and identifies priority programmes through interaction with multiple stakeholders. Instead of top-down desk research, the project provides an opportunity to experience and then conduct the empirical research to test the potential of the identified programmes.

In parallel, a series of papers are being prepared by the UP, South African and international authors for special journal issues that will support the multi-sectoral analysis. In addition to the academic outputs flowing from the research, the project has numerous other benefits to the IRT, including building a sound relationship with DAFF; an opportunity to work with the Food and Agriculture Organisation, provincial departments and the private sector.

Most importantly this initiative provides the IFNuW an opportunity to make a tangible contribution to address the issue of food security and invest directly in the future of the country.

The project supports the development of the CAADP Compact – a set of priority programmes that government will commit to – and the accompanying National Agriculture and Food Security Investment Plan.

The Compact will be endorsed by Cabinet and signed at a ceremony hosted by the Southern African Development Community (SADC), the African Union and NEPAD. The Investment Plan will be reviewed by a team appointed by the AU/NEPAD and presented to the international development community.

Project leader

- Prof Sheryl Hendriks – **see profile on page 12**

Team members:

- Mr Mmatlou Kalaba of the UP Department of Agricultural Economics, Extension and Rural Development, in partnership with the Food and Agricultural Organisation and the Department for Agriculture, Forestry and Fisheries.

- The project is managed by BE@UP.

Students working on the project:

- Dr Mjabuliseni Ngidi;
- Mr Christopher Manyamba;
- Ms Maria Molokomme

Project partners:

This project is an exciting partnership with active engagement with Mrs Noncedo Vutula (Chief Director: International Relations and Trade, DAFF), Mr Winston Makabanyane (Director, Africa Relations, DAFF), Ms Bongeka Mdeleleni (Africa Relations, DAFF), Dr Tobias Takaravasha (Representative of FAO in South Africa), Mr Lot Malati (Assistant FAO Representative for Programmes) and the African Union/NEPAD Coordinating Agency through a Letter of Agreement administered by Business Enterprises at the University of Pretoria.

Project 6: Gauteng Food Security Situational Analysis

The province of Gauteng is currently developing a 20-year food security plan to reduce the levels of hunger by 50% and increase access to food by 2030.

This involves a comprehensive process of consultation with communities, stakeholders, officials and academics to determine the extent of food insecurity and map out strategies to address it.

Strategic programmes will be implemented to achieve specific targets by 2030, including:

- No more than 5% of the population should experience hunger;
- No more than 10% of the population should experience inadequate access to food; and
- No more than 13% per cent should live in poverty by 2030.

The Institute for Food, Nutrition and Well-being is working in partnership with the Gauteng Department of Agriculture and Rural Development (GDARD) to develop and implement the food security plan.

Long-term food security

The objective of the research is to produce a Gauteng Food Security Situational Analysis and design an information system capable of long-term monitoring and evaluation of food insecurity levels in the province in support of a plan of action to ensure food security for all in Gauteng.

The outcome of the project will be the delivery of a 20-year Food Security Plan for Gauteng.

The project has been a most exciting partnership between GDARD and the project team. The study highlighted that nearly one in five individuals in Gauteng experiences hunger; difficulty in accessing enough food and lives in poverty. The numerous on-going projects implemented by the Province are not coordinated into an efficient, targeted and comprehensive programme.

There is no comprehensive map of food insecure populations in Gauteng available to

guide the targeting of communities, households and individuals and assessments have been carried out to determine the impact of current programmes and projects.

Meeting the Province's ambitious targets will require concerted, coordinated effort through carefully designed programmes that meet the real needs of the food insecure portions of the population. It should also facilitate the inclusion of a large number of people into the economy through increased agricultural production, improved purchasing power and sustainable livelihoods.

Priority programmes

Seven priority programmes were identified through two consultative workshops – one with national, provincial and municipal participants and the second, with community members from the four Community Rural Development Programme sites in Gauteng. The plan was finalised in consultation with Provincial Management.

The identified programmes are:

- Capacity building for unemployed women and out of school youth;
- Encouraging the establishment of household and community food gardens;
- Establish a nutritional feeding scheme (including strengthening of school feeding programmes);
- Input supplies to stimulate and boost production by smallholders and subsistence producers;
- Facilitating access to markets through direct contracting;
- Provision of public goods to support food production and marketing through the Comprehensive Agricultural Support



Programme (CASP) to support smallholder production;

- Coordination, monitoring, evaluation and reporting.

The plan is currently under discussion at various levels and management structures in the province and will be submitted to the Gauteng Provincial Legislature for approval.

Community engagement

A highlight of the programme so far has been the engagement with communities and officials during consultative workshops. Participatory group activities enabled community members to understand the causes of hunger and poverty and contribute to the discussions about coping strategies and opportunities to overcome it.

Numerous practical suggestions were made by the participants regarding the programmes the Province should be offering to support food production and marketing, capacity building and food assistance programmes for those not able to provide for themselves.

The project has provided opportunities to hear first-hand from communities about their struggles to produce and secure enough food to feed their families. The participatory discussions

have provided a rich understanding of people's every-day struggles and clear direction on what is needed to overcome hunger and poverty to ensure food security in the Province.

The interaction with officials gave researchers an insight into the institutional constraints facing officials who really want to make a difference in the lives of people they serve. The workshops included pre- and post-testing of knowledge on food security to help identify learning gaps that will inform future teaching and learning at the University of Pretoria.

Project leader:

- Prof Sheryl Hendriks – **see profile on page 12**

Students funded working on the project:

- Mr Christopher Manyamba;
- Ms Maria Molokomme.

Project partners:

- The Gauteng Department of Agriculture and Rural Development;
- Business Enterprises at the University of Pretoria.



Project 7: COPC Living Laboratory

The project looks at the disparity between health care inputs and the health status of a large part of the South African society. It examines the implementation of Community-oriented Primary Care as an element in the re-engineering of primary health care and as basis for the future introduction of a National Health Insurance system.

The intention is to contribute to a functioning, effective and efficient primary health care system which supports improvements in the health status of communities. It will support the delivery of Community-oriented Primary Care (COPC) within the City of Tshwane and its integration into the National Health Insurance System.

Among its envisaged outcomes are:

- a sustained improvement in the delivery of primary health care services;
- more experience for students, professional practitioners and community health workers in primary health care, based on authentic learning;
- inter-disciplinary and inter-professional practice;
- strengthened research activities.

Improving community health

Through this project the research team wants to improve the health of communities and gather appropriate evidence and knowledge that can guide future development.

The Living Laboratory project sets out to achieve a number of objectives:

- To develop and research the process and impact of COPC and community engagement on student learning, learning of COPC team including community health workers and community health.
- To contribute to a deeper understanding of the issues through communicating the findings of the project to students, service providers, learning institutes and communities;

- To maintain COPC Living Laboratory as a continuous learning platform for students, health care practitioners and members of the community;

- To encourage undergraduate and post-graduate student involvement in COPC and primary care re-engineering.

COPC was implemented in a number of sites through Municipal Ward-based Outreach Teams. The COPC teams, consisting of community health workers, nurses and doctors, deliver comprehensive on-going care in specific geographical areas in the City of Tshwane.

Initial findings demonstrate the way in which major complex epidemics are present in communities and the inability of the existing health services to identify and respond adequately and timeously.

The LCAS (Longitudinal Community Attachment for Students) programme in collaboration with the Department of Construction Economics was awarded the UP Laureate Education Innovation Award in 2012. The Department of Family Medicine Team has been awarded the 2013 HELTASA Education Award.

A long term collaboration agreement with the City of Tshwane to implement COPC on a large scale is being finalized. In this the Department of Family Medicine will be responsible for the ICT and data management and the education and research in the project. This will provide a stable COPC education and research platform in Tshwane.

The COPC Living Laboratory provides a service-learning-research platform for community-



Photo Credit: COPC Living Laboratory

based practice in the City of Tshwane. It is built on an on-going, real-time, household-based information system that provides basic information on health and social issues, including nutrition and wellness.

Project leader



Prof Jannie Hugo

As Head of the UP's Department of Family Medicine Prof Hugo is accountable to a society that suffers from disproportionate poor health. He sees his academic mandate as teacher and primary care practitioner as a platform to have an impact on health care not only now, but through his students in the next 20+ years. Building and guiding an unbelievably creative, committed and diverse team at UP Family Medicine is a fascinating journey that requires on-going decisive action, reflection and adaptation.

Prof Hugo learnt his trade at the University of the Free State, gained experience in primary care practice in the mountain villages of QwaQwa, and grew up as an academic in the Medunsa Family Medicine department from 1989 to 2006.

He participates in local, national and international primary health care and education through memberships of the Health Professions Council of SA, the Collaboration for Health Equity through Education and Research, Primafamed (Primary care and family medicine network for Africa) and the Madibeng Centre for Research.

Through these experiences he has learnt to view and engage education and health care from the local individual – patient and student – level to the household, ward, district, national and international system levels.

Team members:

- Prof Tessa Marcus - Extraordinary Professor, Department of Family Medicine.
- Ms Nomonde Bam - Associate Professor, Department of Family Medicine.
- Dr Philemon Mahuma - Family Physician, Senior Lecturer, Department of Family Medicine.
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Project partners:

- The National Department of Health;
- The Gauteng Department of Health;
- City of Tshwane;
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- Mezzanine;
- Synaxon;
- Wellnicity;
- Get Connected.