

Reality Check in the Rural and Health sectors in Nicaragua

Study on three communities: urban, semi urban and rural



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Acronyms and abbreviations

ADDAC Association for Sustainable Agricultural Diversity and Development

APRODEC Association for the Promotion of Community Development

CARUNA National Rural Savings and Loan Cooperative

CPC Citizen Power Council

FINCA Foundation for International Community Assistance

GDP Gross Domestic Product

GRUN Government of National Reconciliation and Unity

H/C Health Centre
H/P Health Post
HR Human Rights

IDR Institute of Rural Development

INIDE National Institute of Development Information
INTA Nicaraguan Institute of Agricultural Technology

MAGFOR Ministry of Agriculture and Forestry

MIFAMILIA Ministry of the Family MINSA Ministry of Health

MOSAFC Family and Community Health Model NGO Non-governmental Organisation NHDP National Human Development Plan

OTR Rural Titling Office

PAST Transport Sector Assistance Programme

PGD General Development Plan

PNTA Participation, Non-Discrimination, Transparency and Accountability

PROCREDIT ProCredit Bank

PROMUJER Women's Programme

PRORURAL National Programme for Productive Rural Development

RAAS Southern Atlantic Autonomous Region

SICO Community Health System

Sida Swedish International Development Cooperation Agency

UCA Union of Agricultural Cooperatives

USA United States of America

VIF Domestic (Intra Family) Violence

WFP World Food Programme
WHO World Health Organisation

TABLE OF CONTENTS

EXECUTIVE SUMMARY

- I. INTRODUCTION
- II. MAJOR FINDINGS RELATED TO HEALTH AND PRODUCTIVE RURAL DEVELOPMENT IN THE COMMUNITIES OF SAN ISIDRO, EL TUMA-LA DALIA AND LA ADUANA
 - II.1 MAJOR FINDINGS RELATED TO PRODUCTIVE RURAL DEVELOPMENT
 - II.2 MAJOR FINDINGS IN HEALTH
- III. SYNTHESIS AND ANALYSIS OF PARTICIPATION, NON-DISCRIMINATION, TRANSPARENCY AND ACCOUNTABILITY (PNTA)
 - III.1 PARTICIPATION
 - III.2 TRANSPARENCY
 - III.3 NON-DISCRIMINATION
 - III.4 ACCOUNTABILITY
- IV. CONCLUSIONS AND RECOMMENDATIONS
 - IV.1 CONCLUSIONS
 - IV.2 RECOMMENDATIONS

ANNEX No. 1: Indicators and Description of Communities Participating in Study

Executive Summary

This reality check was conducted to consider the perspective on development of the population living in conditions of poverty, particularly related to health care services and support for rural development. It was conducted within the context of the principles of participation, non-discrimination, transparency and responsibility. The reality check surveys the opinions and experiences of poor people and provides information about how changes related to health services and support for production are perceived in the rural sector, how poor people understand and experience their difficulties, and how the residents perceive themselves as partners and bearers of rights.

The study was conducted in three selected communities: one rural, San Isidro, in the municipality of Nueva Guinea (the South Atlantic Autonomous Region - RAAS); one semi-urban, El Tuma, in the municipality of El Tuma-La Dalia in Matagalpa; and one urban, La Aduana, in the municipality of Somotillo in Chinandega. At each location, interviews were conducted of 20 poor families that perform productive activities and are health care service users.

This study does not attempt to provide statistically representative results or consensus opinions; rather it deliberately explores the range of experiences related to health care and the economic and productive condition of people living in poverty. Members of the study team visited the homes of families in the three communities selected and used an approach based on participatory processes that foster the acquisition of information by establishing links with the interviewee. The emphasis was on two-way conversations, shared analysis, listening and observation. The family households were the main unit of study. The households that participated in the study correspond to poor families, almost all with daughters and sons living with them.

Major Findings

The major findings related to productive rural development indicate that, in the three communities, there are families that own their own land, with a lesser number working rented land. Almost all the families own their own homes. These are farming families that cultivate small areas that range from one-half to ten manzanas [0.35 to 7.0 hectares]. The semi-urban community (La Tuma) is characterised by farmers that are organised in cooperatives with access to services and facilities that support production tasks (credit, technical assistance, inputs and seeds, and others). The farmers in San Isidro, a wholly rural community, do not have access to services to support production. There are very few providers of services to support productive activities in La Aduana.

Technical assistance and training are mainly available for farmers belonging to cooperatives and other associations. The father of the family and his children participate in the productive activities, other times, it is only the father. In the rural area, women are integral participants in production. There are a few women who are both the heads of the family and devote themselves to production tasks with their small children and relatives; in these cases, the women assume all the roles of production. In other cases, women work alongside their husbands. In the urban community, there are few women that participate in production tasks. Usually, few women participate in training activities; the majority of the participants are men.

Most of the farmers believe that they do not receive the support required for their productive activity. The projects and programs of the government and non-governmental organisations (NGOs) do not reach them or they benefit only a very small number of families, as in the case of the Zero Hunger Programme (Production Package). Furthermore, the farmers from rural areas that have land and are not members of cooperatives, and farmers from semi-urban areas that do not have land, do not have access to credit. The basic problem that they face, according to the farmers themselves, is financing.

Those users who have received them place a very high value on production support services (training, technical assistance, credit, inputs and seeds, backyard economy efforts, sanitary surveillance and certification, support for organising, reforestation, and the prevention of forest fires, etc.) They also appreciate the work that the technical specialists perform. Farmers that do not receive or cannot pay for technical assistance exchange information and experiences with other farmers, consult with the companies where they buy their inputs, or apply knowledge from their own experience.

There is environmental deterioration in the three communities, despite some efforts to promote reforestation. The farmers are conscious of climate change and attribute it to deforestation caused by human beings.

There are not high levels of child labour in the three communities. Parents attempt to ensure that their children attend primary school; in the productive sector, some children and adolescents collaborate with the fieldwork after classes.

There is frequent migration, mainly in search of work and to improve the family income. The major migration destinations are El Salvador, Honduras, Costa Rica and the United States.

Most of the farmers that do not own land feel excluded from actions executed by the projects and programmes that support production (credit, technical assistance, training, facilities to obtain seeds and inputs, etc.) And they feel that the main reason for this discrimination is precisely that they do not own land.

There were no sites in the study where residents claimed that there was tangible discrimination based on political aspects, sexual preference or gender, although they mentioned that there may be some political favouritism in the government programmes.

The major findings in health indicated that the only health services provider is the ministry of health (MoH) through the health posts and centres and the hospitals. There are health houses or base houses in some sites that a nurse or doctor attends (usually through weekly visits) at which the residents are treated and provided with basic medications. There are insufficient medical personnel.

The population does not have proper information on the new health care model (the Family and Community Health Model - MOSAFC) and does not yet understand the logic of care under this model.

The health units in the rural areas serve various neighbouring communities, thus the users often must arrive early to obtain a number and have the possibility of being seen that day. If not, they must wait until the next visit of the nurse or doctor.

The most frequent health problems are colds, fever, stomachache, vomiting, diarrhoea, cough, headache, flu, pneumonia, kidney ailments, allergies, parasites, asthma, bronchitis, bone pain, hernias, sore throats, anaemia, malaria, arthritis problems, rheumatism and bronchial pneumonia.

In general, the patients do not mention problems with access to the health facilities, but the majority resent the lack of attention caused by the excessive number of patients that must be attended. The population is informed about health issues and services, vaccination campaigns, child weighing sessions, mosquito and malaria control through the radio or presentations by volunteer health workers (brigadistas), volunteer collaborators and community leaders.

In principle, public health services and medications are free and this is true in all the MoH facilities. Nevertheless, there are insufficient medications (some patients receive them and others do not). There is a basic list of approved medicines, however not all are available in the health units. When a health post does not have sufficient technical capacity to address adequately some of the cases attended or does not have the medications necessary, the patients are referred to the municipal health facility, especially those that require specialised medications. When the medications are scarce and the public health facilities cannot supply them to patients, treatment is interrupted unless the families have the means to purchase them.

To address their more serious health problems and emergencies, the families seek solidarity from relatives and neighbours, sell some of their belongings or contract debt; or they simply treat their illnesses with the medications that they can purchase or turn to traditional or alternative medicine.

The assessment of the residents regarding the health services that they receive is not good. Quality and warmth in health treatment is very important for the efficacy of the services, treatment and satisfaction of the users, as is the confidence transmitted by the health care personnel at the time of treatment. The residents do not feel that they receive this type of care. In some health posts, the turnover of the doctors affects the relationship with the patients and therefore the quality of care. The residents emphasise the lack of compliance with the scheduled working hours.

In the three communities, the health facilities were built between two and six years ago and are in good structural condition, all with the typical MoH blueprints.

In El Tuma, special measures are taken to ensure the inclusion of the poorest residents. In cases of extreme poverty, the municipal government provides support in the form of medications to families that cannot buy them, and transportation in emergency cases. Another special measure in that municipality is the cereal provided by the world food programme to pregnant women and children at risk for malnutrition. In La Aduana, care is provided in the community health system for children from zero to five years of age in the community, including treatment for parasites, vaccination and the provision of vitamins.

Residents currently express their opinions and complaints regarding services through the local Citizen Power Councils (CPC) and the municipal health committee.

The treatment of users leaves much to be desired, not only due to the manner in which this occurs, but also due to absence of service (La Aduana) and the lack of comprehensive care due to the absence of medical personnel (San Isidro). The high turnover of doctors, coupled with little experience of

some and the absence of others, generates dissatisfaction among users. Those interviewed did not indicate any inappropriate behaviour by health care personnel.

In terms of family planning, women are usually the ones that "plan" and the men are either aware of this or are simply unaware of how the system works and accept the decisions of the women.

The perception of the work of the volunteer health workers (brigadistas) is positive as they assist patients who do not have resources in transporting emergency patients or paying for transfer of patients to the municipal seat. They participate in clean-up and mosquito elimination campaigns, provide support for prenatal care and in weighing and measuring children, and they provide training on personnel hygiene.

There is extensive use of traditional medicine in the communities; this is in part due to habit and custom, but mostly due to lack of economic resources to purchase medications.

Participation

There is a high level of awareness among the population regarding the existence of programmes to support health and the development of rural production by the government, NGOs, and programmes and projects. Nevertheless, the population participates very little in influencing the content of this support, the way that it is delivered and the selection of beneficiaries. The residents, particularly the poorest residents, do not participate at all in making decisions related to these issues.

It does not seem that the population believes it has an established right to participate in these decisions, but rather that this is something yet to be achieved and requires a struggle, or that is a kind of favour granted by the government. There is participation by residents of the communities studied through volunteer work as health brigadistas, and particularly the women are conscious of the importance of caring for the health of the family and the importance of community participation in that field.

Regarding support services for production, there is greater attention to the cooperative movement and to farmers in associations, especially for improvements in technology and production. They are linked to the programmes and projects; their voices are heard; and they receive the greatest benefits from the services offered. A second sector, comprised of small landowners who are not organised into cooperatives, does not receive much attention, has little access to financing, training and technical assistance, and must use their own resources to improve their production. A third group, small farmers who only have one or two manzanas [0.7To I.4 H] of land and that lease land to work, usually are not subjects of credit and do not receive training or technical assistance. It is very difficult for them to produce enough to sustain their households. These latter two groups are part of the population living in extreme poverty and benefit less from available support and services.

Transparency

There are not many decisions made at the local level, either for health support and services in the health posts or for production services. There is no institutional representation of the ministry of agriculture and forestry (MAGFOR) or of the National Programme for Productive Rural Development (PRORURAL) in any of the three communities studied.

There is a difference between the public policy on health (set forth in the MOSAFC), the local needs and demands, and the limited services that reach the population in the health facilities studied. The needs of the population on health matters and support for production are not covered. Adequate information is not supplied to the users of these services to enable the population to know what to expect from the government or from other interventions in the nearby areas.

In the health sphere, there is a set of primary health care programmes directed at the poor in the framework of the new model of care. However, there are implementation problems with the programmes, due to the lack of medical human resources and the deficient treatment by personnel as well as the lack of medicines. This causes disillusionment among the users: on the one hand, they are informed that health services and medications are free, and on the other hand, in many cases, they do not receive either medical care or medications, or if they receive the care, they are given prescriptions to buy the medications.

The MOSAFC promotes the participation and transparency and <u>states</u> "that to responsibly exercise citizen participation in local development, there are different decision-making arenas at different geographic levels, such as community councils, territorial networks, Citizen Power Councils (CPC), village cabinets, and national, provincial, regional or municipal roundtables that make it possible to plan and co-execute actions and to develop social control". The implementation of what is proposed by MOSAFC would significantly increase the participation of the population in decision-making at the local and central level, improve accountability to the public and keep the citizens well informed.

Non - discrimination

Excluded, marginalised and discriminated groups must be identified and provided special attention. For diverse reasons, basically economic, the poorest and excluded persons that live in rural areas have fewer possibilities of receiving medical care, even in emergencies. Furthermore, they invest a higher percentage of their income in their own health care and have fewer resources to access health facilities at the municipal level and even less for hospital care. The purchase of medicine is beyond their means and thus they resort to using products offered by traditional medicine.

In terms of support for production, the programmes and projects prioritise service for farmers who are members of cooperatives or associations; the poorest farmers do not receive greater service. Furthermore, the vast majority of the beneficiaries of programmes that provide production support are men, as generally they are the heads of the families and because the women are not given many opportunities for training and technical assistance. One exception is the Zero Hunger Programme, in which women heads of households who own a minimum of one manzana [0.7 H] of land have been selected as prioritised beneficiaries.

Women often feel excluded from decisions related to the management of production activities because traditionally the men have been responsible for this. The men distribute, negotiate and sell the production and determine the use of the resources that come from this sale. Women make most of the decisions regarding family health, not because men are excluded, but because the men themselves believe that these decisions are the mothers' responsibility

Accountability

Accountability refers to reporting on the relevance, coverage, quality, efficacy and impact of the services that the state offers as a response to the needs of the population. The government must accept that it should supply many benefits and services to the poor and must assume responsibility for this. It must also promote other existing programmes and projects that provide support in the fields of health care and production to help address these needs, as the government cannot cover all of them.

The new MOSAFC health care model, being implemented by the current government, aims to integrate the programmes so that health services are more accessible, effective and based on a preventive approach (primary health care). This new model needs to be publicised for all users to understand it fully. In terms of accountability, the MOSAFC emphasises that "as a result of the effective and active participation of the population, there is social control over management, which facilitates greater transparency and efficiency in the use of resources, thus achieving a greater impact of actions in health care and other sectors...the quality guarantee is associated with the participation of society to make connections aimed at evaluating the processes for care offered by public and private service providers..." as with the issue of participation, the MOSAFC, in theory, indicates fairly precisely what should be done for proper accountability. In practice, the model has not been implemented; it is still at the level of intentions and not realities.

Major conclusions

- Health care services and support for production in the communities studied do not prioritise people who live in extreme poverty and excluded people, especially those that live in communities that are most difficult to access; they do not feel served.
- The reality check indicates that the opportunities that the poorest people have to access health services and support for production are limited. Farmers and poor residents feel excluded, from health care as well as support for production, and the services that are accessible do not fully satisfy or serve their needs.
- In recent years, important progress has been made in the health sector. However, the progress is greater in population groups with higher economic income, thus increasing equity gaps. Furthermore, many poor people must pay for medicines and other health needs with their own resources. This significantly affects their income, as it is a substantial proportion of it.

- In the rural health facility studied, the service is irregular; it is, in practical terms, mostly in the hands of the health volunteers.
- There are significant initiatives in all the communities for participation and the government
 is seeking to increase this and citizen auditing. These initiatives are defined and designed,
 but have not yet been implemented. However, poor people still lack the opportunity to
 participate in decision-making to control, evaluate and improve health care services and
 support for production, and they have even less opportunities to demand improvements
 in them.
- There is strong solidarity among the poor that enables them to help each other to face problems that arise, both in health matters and in the development of production.

Recommendations

The recommendations refer to the situation that exists in the three communities studied; however, given that they may be representative of similar situations in other communities with similar characteristics, some general recommendations are also added.

- Authorities from the MoH and public sector agricultural agencies (SPAR) that are responsible for actions related to health and farming development in the communities studied may use the results presented in this study to take corrective measures regarding the unsatisfactory situations disclosed.
- Measures must be taken to reduce the current disparities in health care and to cover the needs of the poorest and most vulnerable sectors of the population
- The implementation of MOSAFC is fundamental to increasing participation, non-discrimination, transparency and accountability in the health sector.
- If the situation revealed in this study is confirmed by other studies, the MoH should investigate the causes of the situation described, particularly the potential causes related to the inefficiencies in allocating and using resources.
- It is important to analyse and design a strategy for services that prioritises the poorest
 and concentrates public health care spending in the most important services to ensure
 coverage of their needs and improve results in health and nutrition. Selective and effective
 coverage is needed and should include: the application of programmes to improve coordination between sectors; the enhancement of the organisation and technical quality of
 services; an increase in the supply of qualified personnel, medications and other support;
 the implementation of actions to renew a positive attitude toward service to the population by health care personnel
- There should be investigation of potential inefficiencies in current spending on health that seem to favour metropolitan areas and hospital care.
- More resources should be directed at primary care, prevention and the promotion of health interventions. In addition, the system for allocating human resources based on his-

toric patterns should be analysed in order to seek a solution to the scarcity of doctors and nurses in health facilities in poor locations, especially in primary health care programmes and services.

- The new production model advocated by the Government of Reconciliation and National Unity (GRUN), in which the recovery of impoverished farmers is an integral part of the national development strategy, recommends that there be a continuation and increase in facilitating the means of production, technical assistance and financing for peasant families in order to overcome their poverty status and to restore their productive potential.
- To reduce the gap in services between farmers with land and those without, between the poorest and those that are less poor, PRORURAL Incluyente should incorporate service to disadvantaged groups. Programmes and projects sponsored by international cooperation should also proceed in this fashion.
- It is recommended that opportunities and mechanisms be provided to promote the participation of the population in general and specifically that of farmers in local decision-making, and also in accountability, control and social auditing related to health care services and support for production by the government, NGOs and other organisations.

I. Introduction

Nicaragua is the largest country in Central America and the second poorest country in Latin America. Some data that describes Nicaragua is presented in table no. 1.

Variable or Data (2008)	Value
Surface Area	130,245 kms ²
Political – Administrative Divisions	15 Provinces and 2 Autonomous Regions on the Atlantic Coast, 153 Municipalities
Population	5.668 million inhabitants
Demography	47.29% of the population is comprised of children and adolescents; 50.43% of the population is female and 57% of the population is urban
Poverty	70% of the population
Extreme Poverty	41% of the population
Migration	It is estimated that at least 10% of the population has migrated
Gross Birth Rate	24.9 per 1000 inhabitants
Gross Mortality Rate	4.8 per 1000 inhabitants
Infant Mortality	21.5 per 1000 live births
Overall Fertility Rate	2.8 children per woman
Average Life Expectancy at Birth	72.9 years
Annual Population Growth Rate	1.3 per every 100 inhabitants
Gross Domestic Product (GDP)	US\$6,365.3 million (US\$1,122.8 per capita, the lowest in Central America; Costa Rica has the highest at US\$ 6,808.4)
National Budget	US\$1,452.7 million
Health Budget	US\$236.1 million (16.25% of the total General Budget of the Republic)
Education Budget	US\$339.2 million (23.34% of the total General Budget of the Republic)
Public Spending on Education	5.3% of the GDP (\$203.1 annually per student)

In 2009, Nicaragua faces a significant decrease in budgetary support received from different European countries. Following the two reforms to the national budget, the allocation to the Ministry of Health dropped from C\$5,504 to C\$5,251 million (córdobas), equivalent to approximately US\$259.3 million. Currently, the National Assembly is discussing a third budgetary modification. In recent years, 28% of the budget for health has been financed by donations and loans from foreign cooperation and multilateral finance institutions.

The leading cause of morbidity and mortality are chronic and infectious-contagious diseases. There is a high rate of respiratory and infectious illnesses, mainly affecting children. Endemic diseases more frequently affect women and are more prevalent in rural areas. The country has the highest rate of adolescent pregnancies in Latin America; in the past five years, there have been high rates of maternal mortality.

Nicaragua faces a generalised situation of poverty because of the cumulative consequences of war, natural disasters, the decrease in prices of the major export products, political instability, and public

and private corruption. The external and internal debt places enormous pressure on the annual public budget. The country allocates a large amount of resources to payment of the internal debt, to the detriment of spending on social programmes and poverty reduction. The limited and insufficient financing allocated to the implementation of social policies and programmes has had consequences that will make it difficult to meet the Millennium Development Goals.

The 2008 – 2012 National Development Plan of the Government of Reconciliation and National Unity states that its main purpose is to overcome poverty and transform Nicaragua through the construction of an alternative development model that is more just and more democratic.

According to the conceptual framework of the National Human Development Plan (NHDP), human development is expressed in increased opportunities and capacities for persons, but it goes beyond capacity-building through improvements in health or education. Based on the institutionality of the State, the NHDP offers the opportunities needed to ensure survival and the effective exercise of freedoms for full expression of the human being.

The social policy of the GRUN contained in the NHDP aspires to fulfil the Millennium Development Goals by establishing national strategies, indicators and goals incorporated in sector and institutional plans, programmes and projects. The GRUN has defined overall priorities for the social sector in order to guarantee social rights, including free education and health services.

According to the NHDP, education is the fundamental core of national development; it is anticipated that it will contribute to poverty reduction and the creation of possibilities for sustainable development.

As with education, the GRUN considers health care to be a human right and a factor for development. The health policy centres on ensuring that the population has a healthy environment through free quality preventive health care and comprehensive services (promotion, prevention, treatment and rehabilitation) that are accessible to the entire population and adjusted to the social, cultural, ethnic and religious realities of the country.

The National Health Policy has set priorities on care for children under five years of age, adolescents and women (especially pregnant women), indigenous peoples, those living in extreme poverty, the disabled, war victims and the elderly. It also emphasises care of the environment and combating epidemic diseases.

To address these priorities, the MoH promotes plans and programmes based on interaction with other State institutions and broad citizen mobilisation and participation. The MoH is implementing a new approach in the comprehensive care strategy which is manifest in the Family and Community Health Model (MOSAFC) and its two broad objectives: I) Develop a culture of health promotion and prevention, and II) Ensure universal and free access to quality health care services.

The increase in coverage of health care services will be concentrated in remote rural areas where the poorest sectors have the greatest needs and the least access to care and services. MOSAFC proposes to resolve the problems related to quality of care and free medications immediately and in a sustained fashion.

Economically, agriculture continues to be the major economic and social activity in the Nicaraguan rural context, which is characterised by unequal development of territories, great dispersion of the

population, little integration of the production chains, technological shortcomings, and production systems that degrade the environment and natural resources. All these factors generate environmental vulnerability, poverty, inequity, and food insecurity in rural households.

The NHDP states that: hunger and malnutrition are associated with extreme poverty (the state of more than two million Nicaraguans); there are multiple causes for this and that the solutions must be comprehensive and must be undertaken on the ground in a coordinated fashion; protection against hunger is a constitutional right; food sovereignty will ensure the right to land and the use of national products, especially for micro- and small scale rural farmers; and the food security strategy will ensure that all Nicaraguans, especially the poor and the extremely poor, have access to safe and nutritious foods at fair prices.

The production of basic grains is a priority in the food chain, undertaken by small and medium scale farmers in areas with the greatest concentration of poverty. The NHDP proposes that the primary producer become a specialised provider, linked to a value chain. This will be achieved through technical assistance and training provided through alliances between public institutions and private organisations, in addition to other mechanisms.

The National Programme for Productive Rural Development (PRORURAL) links the strategic actions of the State to foster and support the development of agriculture and related activities. Its central objective is to contribute to sustainable rural development and to reduce poverty in the rural context, implementing diverse policies based on the jurisdictions of the public agricultural and forestry sector. The policy lines of PRORURAL are mainly derived from two great challenges: (I) achieving a competitive position in the context of a commercial opening and globalisation, and (II) the reduction of poverty and food insecurity.

The specific objectives of PRORURAL include the proposal to increase capitalisation of rural families and agribusinesses. For this, direct support would be provided to rural initiatives that enable them to overcome the barriers that prevent growth and market insertion and that use the competitive advantage of their productive potential. The major instruments include: I) support with transfers, II) promotion of financial services, and III) development of rural associations.

The Zero Hunger Programme ensures food security for numerous families and will provide a great stimulus to the economy. The programme involves the distribution of a food production package valued at US\$2,000 (US\$1,500 in animals, tools and inputs, and US\$500 in technical assistance) to some 75,000 peasant families, mostly headed by women. The package includes a pig and a cow, barnyard fowl, seeds, farm implements and other inputs. According to forecasts, when its implementation is complete in five years, the project will be producing 600,000 litres of milk and 375,000 eggs daily, and 1.5 million pigs per year. The total cost of the project is US\$150 million. Most of the inputs required will be procured on the local market, and the programme will generate 150,000 permanent jobs. Each recipient of the package must pay back 20% of its value to ensure continuity of the project.

The Zero Usury Programme is mainly directed at offering microcredit to poor women who are heads of household, in order to finance small commercial initiatives to improve their income and the infrastructure of their businesses. This began as an urban programme, but it has now been extended to the rural sector. By the end of 2008, it had reached 120 municipalities and it is anticipated that it will reach all municipalities this year. In addition to the credit, using a comprehensive approach, the women receive training in gender practices, business administration, etc. The only requirement

is to be part of a solidarity group. No collateral is required except a willingness to comply with repayment of the credit according to the amount and terms that they themselves establish in a mutual agreement with the programme.

Different State institutions, national and international NGOs, and professional and community organisations develop programmes and projects, many financed by international cooperation that supports health care and rural development. These have a positive impact on different aspects of rural social and economic life through: the improvement in access to health care services, the development of productive areas, improving production and the productivity of the land, the facilitation of production activities with technical improvements, and greater variety of products and technical assistance, both for domestic use and for commercialisation. All of the above should translate into an increase in the presence and operations of public institutions and organisations on the ground, facilitation of family and social activities of the population, and improved conditions for community organisation and participation, and, finally, into an increase in income and improvement in the living conditions of the families and the communities.

In this context, a reality check was conducted to weigh the perspective of the poor population regarding development, related to health care services and support for rural development. It took into consideration the principles of participation, non-discrimination, transparency and responsibility. These principles, fostered by the Swedish International Development Cooperation Agency (Sida) serve as a guide and constitute a requirement for poverty reduction programmes to truly be accountable in a transparent fashion, to identify marginalised groups and to be inclusive, to seek social justice and to facilitate the exercise of the right to be informed and to participate actively and influence the services provided by the State and the decisions that affect them. Specifically in Nicaragua, there is a Citizen Participation Law that defends this right.

This study gathers the opinions and experiences of poor people and provides information about how they perceive changes regarding health care services and support for production in the rural sector, how the poor understand and experience their difficulties and how they perceive themselves as partners and bearers of rights.

Based on selection criteria agreed upon in the design phase, the consulting team and the representatives of the Swedish Embassy jointly selected three communities in which to conduct the study: (I) one in an urban area, La Aduana in the municipality of Somotillo in Chinandega; (2) one semi-urban community, the village of El Tuma in the municipality of El Tuma-La Dalia in Matagalpa; and (3) one rural community, San Isidro in the municipality of Nueva Guinea in the South Atlantic Autonomous Region (RAAS). The location of the three communities is presented in Figure No. I.

Figure no. I: Location of the Three Communities



Interviews were conducted of 20 poor families at each location that farm and have needed health services. Annex No. I presents a description of the three communities in terms of their location, population, composition of the families (number of members, sexes, age groups, levels of schooling and work situations) as well as the incomes, housing characteristics, basic services available, health condition of the families, safety of the housing, road access, housing and land ownership, and consumption of food. It also presents population, housing, household, poverty, educational and economic indicators for the communities.

This reality check does not attempt to provide statistically representative results or consensus opinions; rather it deliberately explores the range of experiences related to health care and the economic and productive condition or other related issues of people living in poverty. It complements other types of studies, providing valid and current information centred on the people.

The study required that the interviews be conducted in the communities and households of the participating families that live in poverty, using a qualitative approach and actively listening, emphasising informal conversations. It implied the interaction of the researchers with the people that live in poverty in their own context, as well as in the context of the service providers with which the poor come into contact. It examined the lives of the poor people comprehensively, rather than from the perspective of simply one sector. The study also included marginalised people, the most vulnerable groups or those excluded from society that: (I) suffer generalised disadvantages in terms of education, skills, employment, housing, economic resources, etc.; in other words, disadvantages related to the enjoyment of their social rights; (II) have few possibilities of accessing the institutions that distribute those capacities; and (III) are the groups in which these disadvantages and diminished access persist over the long term.

The members of the study team visited the homes of the families in the three communities selected and used an approach based on participatory processes that foster the acquisition of information by establishing links with the interviewees. The emphasis was on two-way conversations, shared and visualised analysis, listening and observation. The conversations were conducted at different times of the day and evening and included the participation of different members of the family during the time that the consultants remained in the community.

The family households were the main unit of study and are defined as "a family unit that cohabits around a shared patio and that often cooks together". All the households that participated in the study were poor families and almost all had daughters and sons living with them. Moreover, in the rural and semi-urban communities, the families depended upon agriculture for their subsistence. The families participating in the three communities had had health care needs or needs for support of their rural production work in recent years.

The conversations were complemented by observation and the consultants used a guide prepared for that purpose. As the members of the team spent several days with the families, there was a great opportunity to observe and experience daily life. This helped in understanding the dynamic within and outside the home and assisted in obtaining important contextual information for interpreting the conversations.

Furthermore, to put the conversations with members of the households and of the community into context, the study team members observed some cases of health care services being provided. This was not possible for support for production due to the absence of this in the communities studied.

It is important to note that this is a qualitative study based on the perceptions of the population at the individual and family levels. It indicates situations identified by the residents of the communities studied during their interaction with the health care services and support for production that they have received and resulting from comparisons of their expectations with the reality. The study, firstly, seeks to identify, address and resolve unsatisfactory situations. It is not, and does not pretend to be, an evaluation of policies, strategies and areas of action implemented by the State in the sectors of health care and productive rural development. Secondly, it attempts to contribute to optimising the services offered to the population in those sectors and, in particular, seeks to promote improvement of the services that poor people receive.

II.MAJOR FINDINGS RELATED TO HEALTH CARE AND PRODUCTIVE RURAL DEVELOPMENT IN THE COMMUNITIES OF SAN ISIDRO, EL TUMA AND LA ADUANA

The results of the study of the communities of San Isidro (rural area), El Tuma (semi-urban area) and La Aduana (urban area) presented in this section are based entirely on the opinions offered by the inhabitants of those communities during the visits, conversations and interviews conducted with them regarding aspects related to the issues of health care and productive rural development. The results reveal many similarities in some aspects, but there are differences in others. This has depended upon the degree of support (or abandonment) received, in both cases, by the poor families, the impact of national government policies and actions directed at health care and productive rural

development, and the opportunities that these have provided to the poor population. It has also related to the role played by NGOs that provide health care facilities and services and support for rural production, and the role that the local governments have played as development promotion and facilitation agencies for the communities and their populations.

II.I MAJOR FINDINGS RELATED TO PRODUCTIVE RURAL DEVELOPMENT

In general, in the communities of San Isidro and La Aduana, the families own land with a lesser number working rented land. However, almost all the families own their own homes. The population, according to the size of the farms, is comprised of small scale farming families that cultivate areas ranging from one-half to ten manzanas [0.35 to 7.0 h] in size. Some farmers in the rural area have between 40 and 100 manzanas [28 to 70 h.], but this land is only partially cultivated; the rest remains idle due to the lack of economic and technical capacity to put them into production. Both communities lack services to support production (credit, technical assistance, training, inputs, seeds, and other services). Furthermore, they do not have water for cultivating the land, therefore they plant in the second agricultural cycle of the year, in the rainy season.

The semi-urban community (El Tuma) is comprised of farmers organised into cooperatives with access to support services and facilities for production tasks (credit, technical assistance, inputs, seeds and others). There are also farming families that own plots of land who are not organised into cooperatives and who do not have access to support services. These families finance their own investment in production. In addition, there are farming families without their own land who lease land for farming; these farmers are the most disadvantaged as they do not have any kind of support such as that mentioned above and they face the greatest difficulties because they are not eligible for credit, they do not receive technical assistance, support or any type of facilities.

Access and Knowledge about the Alternatives for Production Support Services

The farmers of San Isidro, a wholly rural community, do not have access to production support services and therefore they cannot assess the advantages and disadvantages of such services. The community has not been visited by NGOs or by government agencies for many years, but the residents know that, in other places, farmers are offered goods and services to support production (farmers from rural communities).

The farmers from El Tuma (semi-urban) have access to some production service providers such as the Association for Diversity and Sustainable Agricultural Development (ADDAC), an organisation that supports farmers that have land and that are members of cooperatives by providing loans and purchasing services for bovine cattle, cocoa beans, rice, beans and organic coffee as well as the sale of seeds, fertilizers and other inputs. The government programmes, "Zero Hunger" (with approximately 200 beneficiaries in the entire municipality and four in El Tuma) and "Zero Usury" (with close to 400 beneficiaries in the entire municipality), provide support in the municipality to those that have land to farm. Zona Norte is an NGO that supports women in backyard economy initiatives; the Union of Agricultural Cooperatives (UCA) offers technical assistance for farming and cattle ranching, and the Ministry of Agriculture and Forestry (MAGFOR) supports the cultivation and commercialisation of cocoa beans.

In El Tuma, the farms of those farmers that have land and are not organised into cooperatives are not very extensive (between one and 15 manzanas [0.7 to 10.5 h) and they do not feel served. "The little that we have done is what God gives us to survive, hoping that some organisation supports us in farming, each one has worked through their own effort. We don't get any help from the State..." (farmer who owns one manzana [0.7 h] of land).

In La Aduana, there are very few service providers supporting productive activities. To have access to this type of service, some farmers must travel to the municipal seat (Somotillo) where different NGOs and other entities operate: the National Rural Savings and Loan Cooperative (CARUNA), the Foundation for International Community Assistance (FINCA), Fundación León 2000, the Association for the Promotion of Community Development (APRODEC), ProCredit Bank and the governmental programme, Zero Hunger (production package) administered by the municipal government of Somotillo. FINCA Nicaragua and the women's programme, PROMUJER, provide credit to groups under the solidarity guarantee mechanism. PROMUJER has been working for more than nine years in the community and provides loans from C\$2,000.00 to C\$50,000.00 to small businesses (organised in groups of 25 women). This organisation, in addition to providing technical assistance to the members, follows up on the investment to ensure that it is used for the purposes requested. The Millennium Challenge Account has provided individual financing to one farmer to grow vegetables using an irrigation system.

"The programmes that benefit farming have been concentrated in the municipalities of Santo Tomás, San Pedro and Cinco Pinos and they have neglected the farmers from La Aduana, El Guasaule..."

In the last five years, there has been almost no implementation by organisations or the State of training, technical assistance and extension activities as basic actions to increase knowledge and to improve productive development in the rural areas studied. The residents indicate that they understand that these services are very expensive, as are the inputs, and that it is difficult to travel on the horrible roads.

In the rural and urban areas, the closest locations for access to these services are found in the municipal seat, where there are veterinarians, technicians, engineers, etc., but the farmers do not go there and the professionals do not travel to where the farmers are. The farmers have learned through practice, learning from other farmers; others have empirical experience in farm work, acquired through their family. This same situation is true for the farmers without land in the semi-urban area and for farmers with land that are not organised in cooperatives. They do not have any place to go for technical assistance, "You resolve it yourself -- you know what you need for the plants and buy those products..." (peasant without land, semi-urban community).

Some farming families without land in the semi-urban area were trained in backyard gardens; however, it seems that the land that they have around their houses is not suitable for these types of crops; a first experience, undertaken a year ago, did not bear fruit.

The families in La Aduana (urban community), beneficiaries of the production package, receive a certain amount of technical assistance and follow-up from the municipal government technicians. To resolve health problems of the cattle, the farmers rely on their own experience, they purchase medicine and they apply it to the animals themselves.

In El Tuma (semi-urban community), technical assistance and training have been available almost exclusively for farmers who belong to cooperatives, who have received support from ADDAC

and, recently, from MAGFOR. The training and technical assistance actions are provided on the farms of the cooperative members. The cooperative farmers receive training, technical assistance, inputs, seeds, credit and support for reforestation and backyard economy. The productive activities of the farms are concentrated on the cultivation of citrus, basic grains and vegetables (oranges, tangerines, coconuts, squash, taro, purple yautia, cassava and sweet peppers). They also receive technical support for the preparation of bocashi and vermiculture organic fertilizers, and support for sanitary surveillance and certification by MAGFOR (cocoa beans). "All the learning has been through training; it is difficult because you have to learn..."



Most Frequent Farming-related Problems in the Communities Studied

- Diseases (Rust Fungus) and pests that affect the crops (Locusts, Fall Armyworms, Maya and Chamuco).
- Harvest losses due to excessive rains.
- Soil erosion caused by rains and sand fill in the urban community.
- Poor crop yields due to low soil fertility.
- Lack of economic resources to procure inputs, equipment and implements, and seeds, their high cost and the constant price increases.
- The farmers own little land.
- High cost of leasing land.
- Shortage of credit at affordable terms.

"In 2008, there was a bad rainy season, plus pests appeared, such as the so-called 'slug' that destroys plants and, in order to combat it, you have to work at night to reach its nests..." (farmer, rural community). The farmers interviewed stated that the rainy season was bad because it rained too much and they lost the harvests. This year, 2009, it also went badly for them in the first planting cycle, as it had not rained enough. As always, they are hoping that the weather will improve. Due to the bad rainy seasons, there are cases in which they plant maize and cassava, for example, and they do not obtain the anticipated yields. Therefore, in order to overcome their problems, they resort to close family members to support them. In San Isidro, at the time of interviewing the families, there were two days of continuous rain; they were hoping that the rainy season had started, with hopes that there would be a better harvest so that they will not have to spend resources on purchasing food, such as maize, and can use that money to meet other needs.

In El Tuma, the farmers in cooperatives receive support to reforest their farms with timber trees (blackwood and acacia) from the programmes working in the area: ADDAC and the municipal government. The farmers with land that are not part of cooperatives have reforested their land and grow different crops, using their own income, to help the family economy (backyard economy); they have received support from the municipal government sometimes. The farmers without land have reforested the yards around their houses (with mango, avocado, orange and laurel trees) with their own funds. In La Aduana, one of the families interviewed received fruit trees (rain tree, laurel, cashew, avocado, orange, guayaba and mango trees) from the municipal government.

In San Isidro, the agricultural frontier is expanding and there is no effective control of deforestation. The team observed cut timber that had been readied for transport but had not been taken out of the community because of the rains that had damaged the road, making it difficult to transport the timber on carts.

In the community of La Aduana, the families indicated that the municipal government is supporting the development of the community with the implementation of a potable water project, and that there is currently a project underway to improve the road, which will benefit the farmers.

As head of the household, the father of the family carries out the farming activities along with his children. Other times, it is only the father that farms although, in some cases, it is the woman as the head of household and her children that do the farm work.



Some radio programmes (Escuelas Radiofónicas) foster the exchange of knowledge in the countryside (e.g., promoting the construction of live barriers to prevent mudslides and reforestation to restore the environment).

Production Support Services Received and Their Assessment

In the municipal seats there is a high concentration of microfinance institutions, associations, state institutions or NGOs that support production, but the agencies that offer this support do not have a presence in the rural and semi-urban communities. The farmers work on their own, without any type of major support. Each farmer manages, however he or she can, to develop the productive activity. It is somewhat satisfying to them that they do not have debts but, at the same time, they express a fear of contracting debt. If they need money for production, they sell part of the harvest or one of the animals that they own to purchase what they need for the fieldwork, generally at high prices.

The farmers of San Isidro (rural area) state that they do not receive any type of support for their productive activity, and they categorise this lack of support as negative. They do not receive training, technical assistance, extension services, inputs or seed. They also do not receive support for loans, reforestation, backyard economy, access to markets and commercialisation, health surveillance and certification, processing of raw materials, forest fire prevention, or fostering of associations. The projects and programmes of the government and NGOs or other organisations do not offer services to them, although many of the entities that provide these services and support have offices and operation centres in the municipal seat of Nueva Guinea, a distance of some 70 kilometres from San Isidro.

Other farmers, to address partially their lack of inputs, obtain seeds on loan that are repaid with double the amount of seeds from the production obtained. These farmers work on rented land and, to supplement their income, they work elsewhere as salaried workers. "I have rented land for 10 years for the maize planting season from May to August and the bean season from November to January; the rest of the year I work as a day labourer on farms..." (farmer from the semi-urban community).

There are some negative experiences in the community of San Isidro. In one case, a farmer was supported by an organisation (World Relief) with a loan of inputs, but did not repay the loan due to bad harvests. In another case, a member of the community obtained a loan and did not meet the payment for the same reason. Both farmers had to sell part of their land to pay their debts. In view of the recurring problems that affect farming (bad rainy seasons, drought, pests and diseases), the farmers expressed many fears about becoming indebted, because of the risk of losing their land. "I believe that we are not supported by the central government, or by the municipal government; but I am hopeful that the path that goes from the bridge that was built less than a year ago to the community will be built into an all-weather road, but we have to put up the money which is difficult to obtain..." (farmer from the rural community).

In the community of La Aduana, the government benefited five families with the Zero Hunger Programme (production package). This package includes a pregnant cow, a pig and 10 chickens. The eligibility requirements for this programme include: I) being a woman, 2) having few economic resources, 3) having legal title (deed) to the land, and 3) presenting the personal identification card.

The beneficiaries consider the production package to be very important because of its contribution to the family group and because the income obtained from selling the surplus production makes it possible to feed and maintain the production of the animals received. One of the beneficiaries stated that the package had changed her life and was taking her out of poverty.

In the community of La Aduana, PROMUJER has provided loans to some of its members to improve activities on their farms. One member received a loan of C\$7,000 that she invested in the purchase of a cow and some chickens and also used it to cover other expenses. Beforehand, she had received other loans to purchase fertilizer for the maize and bean crops. "The loans that we have had, we have always paid with my husband's salary from hauling cargo or packages from one border to the other, or by selling animals to make the payments..." (farmer from the urban community). The above situation is an example of the aspirations to improve the living conditions of the families; it also demonstrates that to do so requires financing to invest in their farms and show the responsibility that the women assume in fulfilling their payment commitments.

The farmers from the rural area that have land and are not members of cooperatives and those from the semi-urban area that do not have land do not have much access to credit for any rural activities. The finance organisations that operate in the area charge interest that the farmers consider to be very high and that represents a risk of losing the little land that they do have, due to their low capacity to pay. To access a loan, some farmers from the urban area have to apply for it in the municipal seat, where the entities that offer loans are located: CARUNA, FINCA, Fundación León 2000, APRODEC, PROCREDIT Bank and Zero Hunger (production package). In La Aduana, the only such support has been from FINCA through joint loans and the municipal government through the production package.

The few opportunities to access credit by the farmers in the urban area have contributed to the survival of the beneficiary families in some way. In the cooperatives in the semi-urban area, the production support services received are acceptable; they operate well and the farmers have prospered. Many have already paid their loans and others have their own cattle. Those that have received hens and roosters have received constant support and benefits because their animals have reproduced and that has enabled them to improve the family diet. The support of ADDAC over 11 years of work in the area has been crucial to this process. "With the laws there is more trust by the organisations and the cooperative is viewed and served better. Its legal status gives it validity..." (farmer who is a cooperative leader in the semi-urban community).

The support services received have costs which the family must address "To pay the debt, it is not enough to do so only with the hens, the pig and the cow; that is why I had to work as a cook in a restaurant to pay off the debt..." (woman beneficiary of the production package from an urban community).

In El Tuma, the farmers without land rent from one and one-half to two manzanas [1.0 - 1.5 h], paying between C\$1000 and C\$2000 per manzana [0.7 h] in advance for the planting and harvest period; they rent a plough with oxen at a cost of C\$1,500 (for a minimum of two days). The land is located between eight and ten kilometres outside of town and produces from two to five quintals of beans per manzana, depending upon the type of seed and inputs that the farmers acquire with their own capital.

Depending upon the sale prices for their crops, they separate the part that corresponds to household consumption and the rest is used for the purchase of inputs and seed for the next planting cycle.

The major problems faced by small farmers (with land or not, cooperative members or not) involve their scarce working capital, "When the seed is expensive, I cannot buy it to plant. I have a manzana [0.7 h] of land planted and what I harvest is for my family to eat. When the harvest yields more, I sell a part to buy another product...", "We leave it to God's will; this year it seems that there will be a good harvest of maize and beans. We now know the chemicals and we buy the gramoxone, fertilizers and urea directly..." (small farmers). A farmer stated that he looked for affordable financing opportunities to buy four calved cows, but thus far he has not found it, as there is no programme in the community that provides this type of credit.

It can be assumed that the fundamental problem of these farmers is related to financing: "There is no money, there are no credits to begin the crops, even if the land is rented, you have to advance the money to work; alone, you just get enough to eat. The farmer that produces a little more is the one that has money to spend on fertilizers, inputs and all that..." (small farmer). The situation for this group of farmers has gotten worse because they cannot pay their continuously rising costs. Sometimes they plant and they do not have enough to pay for the seed and the fertilizers; so, planting one manzana [0.7 h] is often not sufficient to reach the point of equilibrium. "There is no support infrastructure; over three years, I have tried to produce: with maize, it went well for me, but the beans went badly twice for me, because of a lot of rain and a lack of inputs..." (farmer in the semi-urban community).

The families of the farmers in La Aduana believe that the ideal would be to receive help to farm and improve their living conditions. They report that, in the last three years, there has been no change regarding the different services that they demand (seeds, inputs, insecticides). Others express that

the situation has become worse and that they would like to receive assistance from the municipal government or from development programmes and organisations to support their farming activities with technical assistance and financing. (They state that, if they were to receive help, they would repay the financing, even facing the risk of a bad harvest, but that they would honour their commitments). The farmers did not properly assess the fact of having an all-weather road fairly close to their lands and the benefit that this represents for all the families in the community. Having an all-weather road gives them the advantage of permanent availability of transportation to purchase agricultural inputs and to transport their products to markets, the option to request technical assistance in the future from government institutions (the Nicaraguan Agricultural Technology Institute - INTA, MAGFOR, the Rural Development Institute - IDR, etc.), and access to microfinance institutions that have affordable credit available.

Some families expressed that their conditions have improved due to the support from the production package, which they had not previously received. Other farmers believe that the support has always been the same, either non-existent or minimal, and that they must rely on their own work and efforts, and for that reason they do not have debts with credit institutions. They expressed that the ideal would be to extend the production package to other families that were interested and met the requirements for participation, and that it not be granted with political criteria. They also want affordable credit opportunities to enable them to purchase inputs and they want the road to be improved. In El Tuma, they stated that services for production have improved if one is in an organised group; "A person alone does not find anyone to connect with; organised, it is different, but one has to work..." (farmer who is a leader in the semi-urban community).

In the semi-urban area, the farmers who belong to cooperatives have more diversified farms; their bean yields are 15 quintals per manzana [0.7 h] (2008) and 12 quintals per manzana (2009) and their maize yields have been 20 quintals per manzana (2008) and 25 quintals per manzana (2009). Since they formed the cooperative, their income has been improving. It has not gone as well for the farmers without land; land rentals have become more expensive (previously, they paid between one-half quintal and one quintal per manzana farmed; now they must pay in cash and in advance). There are many benefits for members of cooperatives and almost none for those that do not own land and who are, at the same time, the poorest among the poor. They feel that they are the least served.

In San Isidro, they grow beans, rice, maize, cassava, purple yautia and taro. In addition, they are beginning to develop cattle ranching, although they do not have support services. This is because the conditions of the area are favourable for livestock development. The yields and profits vary; for example, the farmers stated that they earn very well on the purple yautia crop when there is no problem (a manzana [0.7 h] of this product is sold for approximately C\$20,000). The land is suitable for growing cassava and they obtain high yield harvests. The fluctuation in the price of beans has a great effect (the price of a quintal rose to C\$2,000 and then dropped to C\$500).



In San Isidro, a spontaneous mechanism has been established for trading and exchange which has contributed to improvement in the local market and family incomes. Every Thursday, farmers and residents from neighbouring communities gather in one place where a small market forms for the trading of goods harvested in the area and these are exchanged for consumer products that arrive from La Fonseca and Nueva Guinea, mainly groceries, medicines, clothing and different merchandise.

In El Tuma, the legalisation of many properties is still pending; in the community of San Martín, there are 431 manzanas [302 h] still to be legalised. The residents say that they have government support to regularise this situation.

The farmers from San Isidro do not properly assess government efforts related to improvements in access to the area and the internal vehicular traffic on all-weather roads. The majority are unaware that the construction of the road that reaches the



bridge (eight kilometres before reaching their community) was supported by the Transportation Sector Support Programme (PAST), financed by Danida. The same is true for the bridge built a year ago with support from this same programme.

Provision and Assessment of Production Support Infrastructure

In San Isidro (rural area), the families and farmers do not receive support to acquire equipment and infrastructure. They are unaware of the advantages of possessing these (or do not know how to explain clearly the advantages). They work in a very traditional fashion, without the support of production techniques. However, it should be emphasised that they share the knowledge that they do possess regarding farming matters among themselves and provide each other with seeds and other inputs. In that sense, there is a strong spirit of camaraderie and mutual assistance in the absence of support from the government or NGOs. One of the major reasons that they express for the lack of support is the difficulty in reaching the community, which hinders the presence of institutions and organisations.

In El Tuma, the production support infrastructure is considered very beneficial to the farmers. They have received silos, equipment, irrigation systems, tools, inputs and seeds, although only if they need it, because some prefer to use the basics. In this area, the cooperative attempts to maximise its support to all of its members. The farmers who do not belong to cooperatives purchase inputs, fertilizers and seeds with their own resources and at market prices. When they are not planting their own land or those that they rent, these farmers work as day labourers for other farmers; they go to Matagalpa or Jinotega to work on the coffee harvest, or to deliver merchandise, mainly in the urban areas. This mechanism enables them to survive and generate capital to return to work their land or to rent land and begin a new farming cycle.

"The services that they offer, in general, are quality services, but some turn out badly and others well. Don Benedicto, a well known farmer, has 'taken advantage' -- large livestock, irrigation tanks -- he is a good example..." (farmer from the semi-urban community).

Those that have received production support services (training, technical assistance, credit, inputs and seeds, reforestation, backyard economy, market access and commercialisation, sanitary surveillance and certification, forest fire prevention, and support for associations) offer a positive assessment of the services received, but they indicate that only cooperative members can access those support services. The service providers are ADDAC, the municipal government, the UCA and Zona Norte, "There are no services provided to those that do not have land, for those of us that are the neediest, there is no support..." (farmer from the semi-urban community).

In El Tuma, the farmers without land do not have sufficient support infrastructure and their existence is precarious. It is not for them to make that type of investment as they are working on rented land. "The infrastructure is poor and that is why the animals eat the harvest..." In that same community, the farmers in cooperatives have access to facilitation of the commercialisation of their harvests through the cooperative. They have silos and thus are able to store their produce all year for family consumption, other needs and for the purchase of seed. Furthermore, they receive credit for production, in seed and inputs, from ADDAC, the UCA and the municipal government.

In La Aduana, the farmers have not received support for the improvement of infrastructure for production (silos, equipment, tools, and irrigation systems). The same farmers, little by little, have invested in infrastructure for production and have acquired, with their own resources, agricultural implements, inputs, seeds, insecticides and fertilizers. Of the farmers visited, only one had a silo to store the harvest (he bought it for C\$1,600) and he explained that he did not know of any programme that would facilitate the procurement of this type of infrastructure.

In La Aduana, there are few farmers that own cattle (usually between one and seven cows); the predominant infrastructure is corrals. In the first quarter of the year, a farmer was visited by a technician from the Millennium Challenge Account who suggested installing a cement floor in the livestock corral. They talked about the advantages of improvements for agricultural production, food for the dry season and infrastructure for production, but the technician never made a return visit.

Human Resources that Provide Services for Production

The human resources that provide technical assistance are rated well by the farmers who are members of cooperatives as the latter receive that technical assistance from the engineers and extension agents from the service-providing organisations. "Well-qualified and they treat us well..."; "The ones from ADDAC have experience and knowledge...", "There are enough of them; according to their organisation, they are each responsible for a group of farmers (men and women)..."; "There is a group of technicians from ADDAC for each town. In El Tuma-La Dalia, it seems that there are enough of them to serve the farmers; they always visit us..."

In general, the service that they offer to farmers is adequate and there are no complaints about it. In addition, they have had the vision to provide assistance through male and female technicians. "Good service. They make us understand..."

Farmers that do not receive or cannot pay for technical assistance exchange information and experiences with other farmers, consult the companies from which they purchase inputs, or apply their own experience.

In view of the abandonment by support programmes of individual farmers from rural and urban communities, there is not much to say about the competency, involvement and quality of the human

resources of service provider organisations. Farmers that do not belong to cooperatives have not had the opportunity to receive training or technical assistance, and therefore they cannot provide assessments of the qualifications and experience of the technical personnel.

Community Participation in the Development of Production

Support for production in El Tuma is determined by the participation of the farmers in cooperatives; the members of cooperatives receive the most support for improving production on their land. The cooperatives extend throughout the municipality and have strategic alliances with the municipal government and with organisations that support production. Therefore, support for the farmers who are members of cooperatives is well ensured. There is extensive experience in exchanging knowledge promoted by these organisations.

The farmers that do not receive support indicate that the problem is finding a solution for the farmers who do not belong to cooperatives. To achieve more sustained production in the municipality, they believe that land could be distributed to the farmers that do not own land; work on this must be undertaken together with the municipal and central governments.

The cooperatives are organised for production, the members mutually support each other to bring in the harvest. Someone is responsible for collecting the produce and selling it, one part is sold and the other part is stored in silos for seed and for consumption, until the next planting cycle.

The farmers without land are not organised for production -- the work is individual. They also sell their produce individually; one part to pay off debts and the rest is for family consumption. If there is a surplus, they use it as capital to rent land and to purchase seed. They store their produce in sacks.

Some of the individual farmers have tried to form associations, but the experience has not been good. Many do not want to acquire debt out of fear that they will not have the means to repay it, and others (that have land) are assessing the possibility of joining cooperatives in the area, considering the benefits in production support and infrastructure to be advantageous for them.

The possibility of joining cooperatives is strengthened in light of the good experience of the work by ADDAC with farmers in the area, consisting of sustained support over a number of years.

In La Aduana, there is no organisational structure that seeks support for the farmers from government agencies. The only such activity is undertaken by FINCA Nicaragua and PROMUJER, which provide solidarity recommendations for loans to their members and follow-up on payment of these.

In San Isidro, the farmers resolve their problems individually, without any degree of organisation among them. There is no organisation in the community that assists them, thus they have seen no change in recent years and have a pessimistic outlook on the future given this situation. They do not receive training on farming issues or transfer of knowledge, except what occurs among them, based on cumulative experience. The only governmental organisation that has operated in this area has been the Office of Rural Titling (OTR), which regularises land ownership.

Environment

In San Isidro, a certain amount of progressive deforestation is observed, with no apparent efforts to contain this.

In El Tuma, because of the deforestation and fires, things are changing rapidly. "People request a permit to chop down a tree and then chop down two or three. There is a lot of deforestation in the municipality, so the municipal government is encouraging reforestation..."; "It seems very difficult; we get training and try to diversify the land so that we have something to eat, because if we only go for one crop, we die..."; "There is a breakdown in the weather; there is a deficiency; you plant at the right time and often the rain doesn't come..."; "The municipal government and the projects have wanted to help with reforestation to avoid global warming; they have reforested with blackwood and acacia trees; they have planted 500 trees in three months..."

In La Aduana, reforestation activities have been conducted, promoted by the municipal government. In 2008, they distributed 100 elephant ear trees and rain trees to reforest the area near the Guasaule River. One of the families interviewed received fruit trees (rain trees, laurel, cashew, avocado, orange, guayaba and mango trees). Those interviewed were not aware of the existence of a reforestation plan or preventive and protective measures to care for the environment.

The farmers are aware that the climate is hotter; that the rainy seasons are bad and that there is a lot of drought. They attribute this, as one of the causes of climate change, to the deforestation caused by human beings.

Gender

There are varied situations regarding the participation of women in productive activities. In the rural area, there is integral participation of women in production. A few women are heads of households and devote themselves to farm work with their small children and relatives; in these cases, the women perform all the roles of production. In other cases, the women work alongside their husbands, to such an extent that there is no distinction between their roles in production. Others only participate by listening to their husbands talk about the progress and problems with the crops and, in some cases, by providing advice about how to find solutions to those problems. In the semi-urban area, things have changed now; there is a certain preference for women in the support programmes (cattle, barnyard fowl, pigs, production packages and legalisation of property). In the urban area, few women participate in farm work; some support it by obtaining credit and others leave this to their husbands because they believe that "he is the one who knows". In general, the number of women that participate in training activities is low; usually, most of the participants are men.

In some households, where the women participate with the men in production, they appear surer of themselves -- they took the initiative in responding to the questions without waiting for their partner to answer first. In addition, they give their own opinions about the work in the field without seeking the approval of their partners.

Child Labour

In the community of La Aduana, children are not observed to be working as child labourers; their parents look for ways to enable them to go to school. In the productive sector, some children and adolescents collaborate in the fieldwork after going to school.

Child labour has not been detected as a problem in El Tuma; "It is prohibited, although some children work selling food and many cannot go to school because of the poverty and there are children who steal..." The work of children is only mentioned in terms of concrete tasks. "They only support the activities in the fields on Saturdays..."; "The children take the food out to the field where the adults are working..." There are cases in which the girls have the tasks of making the food and going to school.

In the community of San Isidro, the children participate in the fieldwork to a certain extent, but most go to primary and secondary school. Nevertheless, at peak farming times, the teachers allow the children to leave class early to collaborate in the fieldwork. There are illiterate children that work in the field, thus the production activities do interfere with their education.

Migration

In the community of La Aduana, there is frequent migration in order to obtain income for the family. The major migratory destinations are El Salvador, Honduras, Costa Rica and the United States. The same is true for the community of San Isidro, with high levels of migration to Costa Rica; some families estimate that approximately 60% of the population has migrated to that country. Some have sold their property and left the place. In El Tuma, it appears that migration is temporary and that it has not had major effects. Some of ADDAC's interventions promote the training of young people. "The idea is that young people become involved in the project so that they also have a way to work and to survive..."; "Migration affects the large scale farmer as there are not enough labourers..." During the time of the coffee harvest, farm labourers move temporarily to Matagalpa and Jinotega, but this does not seem to affect the production in this area, as those that go are mainly farmers without land, who work outside the community to earn some capital and then return to work on leased land.

In San Isidro, the high degree of migration is attributed to the high levels of poverty. There are no special support measures for people who are living in the greatest poverty. Many farmers in El Tuma criticise the fact that those who do not own land are not given support for production: "It is a form of discrimination, since they don't support the ones that don't have and they do support the ones that have..."

The population in La Aduana is very poor and feels discriminated against by national institutions and NGOs which, according to them, do not offer them support or opportunities so that they can develop. The sources of employment mostly involve service activities. The division of labour is very marked. Women work washing and ironing clothes for other families, in domestic work, making and selling food near the border since the bus terminal is located in the centre of town. The men provide transportation services on bicycles, transporting people and bags between the bus terminal and the border facilities. A small portion of the population works on their plots, cultivating the land.

Most of the farmers without land feel discrimination as they are not given support for production, access to credit or access to agricultural inputs such as fertilizers, pesticides, etc. because they do not have land.

There were no sites in the study where residents claimed that there was tangible discrimination based on political aspects, sexual preference or gender; although they mentioned that there may be some political favouritism in the government programmes. It was noted that there are women

leaders on the village committees who are held in high esteem by the community residents and there are men and women leaders on the Citizen Power Councils, which indicates that there is not discrimination against women in this jurisdiction for leadership positions.

II.2 Major findings in health

"The important thing is to be healthy for work and to have the energy to do things..." (farmer from the rural community)."

Health care providers

Administratively, the levels of health care services include the primary level or first level of care (community health posts and health centres), and the secondary level or second level of care (hospital). In some places, there are health houses or base houses (spaces for community health services). A health worker administers these with a nurse or doctor who provides weekly service and basic medicines are provided to the population. This study focused on the first level of care in the three selected populations: there are health posts in El Tuma (Matagalpa) and La Aduana (Somotillo) and there is a community health post or house without permanently assigned staff in San Isidro (Nueva Guinea). Medical staff has been assigned to El Tuma and La Aduana (this staff was temporarily suspended in the latter between May and July) and San Isidro has only volunteer staff from the community. The medical services situation in this community is one of abandonment; the community does not feel served by the Ministry of Health (MoH). The visits from the medical staff had been suspended in La Aduana, however the visits from the health team have begun again (a doctor once a week, and the presence of a nurse throughout the entire week).

The model of care that is currently implemented is the Family and Community Health Model (MOSAFC). This Model is based on the Primary Health Care Strategy, which establishes the first level of contact with individuals, the family and the community by the national health care system through their full participation, with a spirit of self-determination and responsibility, taking health services to the place where people live and work as much as possible. The first element of this is an ongoing process of health care, a central function of the overall social and economic development of the community (MoH, 2008).

This model directs the organisation of health facilities to offer comprehensive services, with a health care team for a defined population, offering: (I) Public health services: Education in hygiene and health, immunisations, health promotion, prevention and control of contagious and tropical diseases and their monitoring and surveillance (water, food, solid waste, others); (II) Health protection and prevention services: prenatal, birthing and postpartum care; newborn care; nutritional services; early detection of cervical and breast cancer; family planning; oral health promotion and monitoring; and the promotion of growth and development; and (III) Timely care services for physical injury and illness: care of the disabled, common childhood diseases, medical emergencies and follow-up, outpatient morbidity, chronic illnesses, newborn problems, community-based rehabilitation, and psychiatric disorders. All of these services are provided in the same place, without having to go from office to office; this same team schedules on-site visits and provides follow-up, when required, in the patient's home.

The health posts are supervised by the health centres located in their municipal seat. The health posts and the health houses are the primary health care reference points for users, and when problems that are more serious occur, they are referred to the health centres. If the patient's condition is

serious, he or she must be referred to the municipal seat for emergency care, where a decision is made regarding transfer to the hospital, which is generally located in the provincial capital.

Volunteers from the communities support the work of the staff in the health posts, they are known as volunteer health workers (brigadistas). They participate in vaccination campaigns, weighing sessions for children, and mosquito fumigation campaigns. The volunteer health workers are in constant contact with the population and frequently visit the people to inform them of health activities. In some communities, there is a volunteer responsible for the control of malaria. They interact well with the population. "They are very responsible and give the population good guidance..."

It is clear from conversations with users of the MoH health services that they did not have adequate information about this new health care model and do not yet understand the logic of this model. This creates uncertainty and a certain antagonism from the users about the services offered. "The problem is that when they tell you to wait, you don't know what is going to happen later, what is going to happen with your treatment and that is why you leave concerned about what could happen to you…"

The MoH units represent the only possibility of receiving health services and care in the three locations. In the municipal seats, there are clinics and individual doctors as well as pharmacies that offer private care and the sale of medicines. None of the health units offers emergency services at night. In San Isidro, there is a complementary program (the Amor Programme) that offers presentations on disease control and prevention.

Empirical Midwives

The MoH promotes the strategy of institutional childbirth, which aims to have births occur in the health centres or hospitals in order to lessen the risk of perinatal deaths. Many women from the area that is served by the health centres have experience attending births and have been included in training processes in order to provide primary care to the mothers and to steer them to the public health facilities. Thus, the percentage of institutional births has risen in recent years.

The community empirical midwives are aware of the MoH strategy and work in a coordinated fashion with the volunteer health workers.

There is an empirical midwife in San Isidro who is also a volunteer health worker; generally, she refers pregnant women to the health post in La Fonseca, but she attends the births of women who refuse to leave the community to seek out this service.

There is an untrained, empirical midwife in La Aduana. "I have attended births, my mother taught me, and I know how from my own experience..." Some women have turned to a Honduran empirical midwife who lives close to the border between the two countries.

Because of El Tuma's proximity to the health post, the two empirical midwives that live in El Tuma have been trained. Although they do not attend births, pregnant women do receive services from them and they accompany them and/or steer them toward the health centre in the municipal seat in La Dalia, where they give birth. These empirical midwives are very aware of the MoH strategy.

Access

The health posts in San Isidro serve the other neighbouring rural communities. Often, the users need to get up very early in order to arrive early and have the option of being seen that same day. On average, they travel between four and ten kilometres on public transportation, on foot, or on horseback; because of this situation those who live close to the health units have a certain comparative advantage in access to health care.

During the first half of 2009, in the La Aduana health post, which has operated normally for the last six years, the doctor stopped going and the nurse only worked there sporadically to ensure the vaccination campaigns, the weighing of the children and the supply of medicines. Since then, a volunteer health worker has referred patients that should be seen in the Somotillo health centre. Recently, due to the HINI flu epidemic, a doctor and a nurse were permanently assigned to monitor people who cross the border, but not to provide general health care services to the population. This nurse also attended pregnant women and weighed the children. "The care is better in the Somotillo health centre, because there is a full-time doctor and they provide medicines that are available…"; "The medical attention is very good and they have done exams for us in the hospital without charging us…" This suggests neglect of the population at the lowest level of care, reinforcing the idea among the users that health situations are better addressed in the health centres.

Health Problems

The most frequent health problems are flu, fever, stomachache, vomiting, diarrhoea, cough, headache, colds, pneumonia, kidney problems, allergies, parasites, asthma, bronchitis, bone pain, hernias, sore throats, anaemia, malaria, skin problems, arthritis, rheumatism and bronchial pneumonia.

Some patients have not had problems accessing the services but many resent the lack of attention caused by the excessive number of patients to be seen. "When they are full, they don't see us, we have to go to the hospital in La Dalia..."

Health Information

The population is informed about health issues and services, vaccination campaigns, weighing of children, mosquito fumigation campaigns and malaria control through the news on the radio. The population hears presentations in the health posts from volunteer health workers, volunteer collaborators and community and village leaders. These presentations address health and nutrition issues, and pregnant mothers are provided with food aid (El Tuma). In addition, teachers provide information to schoolchildren on health matters. The information received is very much appreciated by the population.

The information has been useful for them because, the mothers mention, the children become accustomed to washing their hands frequently and they have adopted healthier habits. This is recognition by the population of the importance of preventive health.

Costs

The national health policy establishes that public health care services are free, including the provision of medicines. In principle, this is followed in all the MoH health units. However, they run out of medicines, and some patients get them and others do not, depending on the disease that they have. "The service is free, but I have to pay for medicines, my husband gives me the money..."; "We have to buy the medicine and we don't have money for that...";

"Generally, there are no medicines, at times there are a few, but they don't give them out either. If there is no money we don't buy them and we go back to suffer at home..."

There is a basic list of approved medicines; nevertheless, not all are available in the health units. "When they operated on me for appendicitis, we paid for the medicines in the health centre in La Dalia..." (person from the semi-urban community).

When the medicines are scarce and they are not given to the patients, they have no alternative but to stop treatment, because many families do not have the resources available to pay for the prescriptions. Other users perceive the scarcity from another angle: "Before there was no relief, now there is a little..." (resident of the semi-urban community).

When there are cases of chronic diseases, and the health post does not have the capacity to resolve adequately the situation, or it does not have the needed medicines, the patients are sent to a municipal health unit, particularly for those cases that require very specific medicines without much demand. In addition, they are given the prescription so they can buy it in the pharmacies.

"They don't charge us in the health post; if they have the medicine they give it to us; if not, we take a step backwards..."; "When there are no medicines we feel badly because we don't have the money to buy them..." (resident of the urban community).

Therefore, many users do not follow their treatment; this means that their ailments get worse and their health condition deteriorates.

The public health care system operates facilities on three different levels in each province and thus it could be assumed that there is a broad range of possibilities for care; however, the people state that economic access is critical. Transportation to the health centre in the municipal seat is more feasible, but the cost for transportation to the hospitals in the provincial capitals is very high, and the people go to these hospitals usually when it is an emergency. The situation is worse in the poor towns studied, because they have no ambulances. "We families go to the health post, but when we see that they can't help, we go to Matagalpa; to do so, we need transportation, and at times the health post does not provide it; although, as soon as they see someone in serious condition, they take them to Matagalpa..."

The decision about going directly to the health centre is also related to the treatment the patients receive and the scarcity of medicines in the health post. In addition, there is a certain amount of dissatisfaction with the health centres because many times they do not perform specialised examinations (ultrasounds or laboratory examinations, for example). In those cases, the families of the patients must pay for the examinations with their own money and most of the population do not have the means to so. The decision to go outside the community requires economic resources, and this is usually beyond the possibilities of poor families, because they have to assume the transportation costs.

"In the beginning of June this year, my daughter fell off a swing at school and suffered serious external injuries to her intimate parts; she was haemorrhaging and fainted due to the amount of blood she lost. Because there was no medical attention in the community health post, we took her to the health centre in Somotillo in a taxi, where they gave her first aid. Since the case was serious, my daughter was taken in an ambulance from the health centre to the hospital in Chinandega where they performed surgery on her..."

The child's accident occurred at 7 am, she arrived at the health centre at 8 am, and to the hospital in Chinandega at 12 noon. The surgery was performed at 2 pm. The child was hospitalised for three days. Since they did not have economic resources, the father of the patient had to borrow C\$500 to pay for the trip to Chinandega and to get his family back to their community. The teachers from the community and the family's neighbours offered economic support to cover the costs.

In situations like these, families rely on the solidarity of their relatives, sell some of their belongings, or contract debt to buy medicines; or they simply do not get them and treat their diseases with the medicines that they can buy, or make use of traditional or alternative medicine.

The service in the health posts is negatively perceived by residents, and the waiting periods are considered excessive (at times all day); although the service prioritises mothers and children, the population does not feel that they are well served. "A child went recently with a sore throat and they told him it was better to treat it with herbs..."

Generally, both parents make decisions about health care, although, when it is an emergency, the women are the ones who must decide, because their husbands are working in the fields. In those cases where the volunteer health workers detect some health problem, both spouses make the decision, even though the mothers are responsible for health more often than the fathers are. They are always guided by the volunteer health workers, who are the primary reference points for the health situation at the community level.

Support from the Municipal Government

The people from the urban and rural communities do not feel that they receive support from the municipal government for their health needs and problems: people from the semi-rural community do perceive some support in this aspect.

The municipal government of El Tuma-La Dalia supports the health activities in different ways: in emergencies they provide a vehicle, assign volunteer health workers to respond to emergencies, provide money for the purchase of medicines and material support, provide facilities for training activities, and assist in fumigation and vector control. In the case of women with cancer, the municipal government has created a fund for the purchase of some medications.

Operation of the Health Units

The assessment by the population regarding health services is not positive. "The administration is not good; they arrive at the time they want and they leave when they want, maybe they don't have anyone to correct them; there are a lot of complaints..." (resident from the semi-urban community);

"It works poorly, you wait all day for them to attend to you, first they attend pregnant women and children and finally the adults..." (resident from the urban community).

The infrastructure and the environment of the health units should have an atmosphere of trust and a minimum level of comfort to encourage the patients to talk about their health problems. The quality and warmth of the care are important to user satisfaction, as is the confidence that the health staff transmits to the patient when being treated. The population does not feel that it receives this type of care. "The condition of the facilities is bad, because there is no one who does the cleaning..."; "There are not enough beds and they don't have equipment; at times we the patients have to do the cleaning..."; "This is inappropriate..." (patients from the semi-rural community). This increases user dissatisfaction, which later makes it more complicated to recover their trust.

The health facilities were built between two and six years ago and are in good structural condition, all with the typical MoH blueprints.

The El Tuma Health Post has three patient examining rooms, an administrative room and a waiting room. It was remodelled a year ago. Part of the roof was repaired and it was completely painted. It has a chain link fence around its perimeter. It was expanded to include a waiting room and two additional adjoining rooms: one for storing food for the program for children that are at risk for malnutrition and another for storing different medical supplies for the immunisation program. The health post is built on a large piece of land and, despite the remodelling, the latrines are dirty and deteriorated and the sinks cannot be used because there is no water. The surroundings leave much to be desired; it looks dirty, and there is paper strewn around the inside of the health post. "The health post looks dirty; there is no hygiene, a lot of garbage. The message is that you have to keep the house clean, but the health post is dirty...."

There is a perception that the quality of care is poor, and the users have made a number of specific recommendations to help improve the quality of the service: "Denouncing the things that occur..."; "Better treatment..."; "There should be mutual support..."; "They should bring in more doctors and more medicines..."; "Make a list of the people and send it to the La Dalia health centre and see what happens, to see if the treatment of the people improves..."; "The government says that these cases have to be denounced..."; "They have to be more friendly because the staff are constantly being changed..."

Currently, two doctors with their respective health aides see patients. "Some things have improved and others have not because of a lack of doctors..." In a Friday morning visit conducted at 11:30 am, two female patients were waiting their turn to be seen; one of them said that she had arrived a little before 8 am and the other a little later, and they were not sure that they were going to be seen.

In this health post, the high turnover of doctors affects the relationship with the patients and therefore the quality of care. "The doctor is good, but the rest of the staff do not help because of the poor service they provide; there is only one doctor for various patients, they change the staff and they no longer treat us the same..."

The schedule for medical care is from 8:00 am to 5:00 pm, except for Fridays, when the doctor visits end at noon to enable the staff to prepare the weekly report. Nevertheless, people pointed out the lack of compliance with the schedule. "They only see patients sometimes and we have to be there waiting, the consultations take a long time and the doctors take a long time to see patients..."

Other users have different opinions: "It remains the same; it hasn't gotten better or worse; they change the doctor and another one comes in who is worse..."; "It has improved a little because if there are medicines they give them to you for free..."

The La Aduana Health Post has two patient examining rooms, along with a room for the dispensary and a hallway. The property is very small. The place is accessible and is located in the centre of the community; it looks abandoned and deteriorated, the furniture has disappeared, as have the toilet and the louvers for the windows. The population takes responsibility for cleaning around the building.

Currently, regular health services and attention are not being provided to the population. The municipal authorities are thinking about sending a doctor to provide care once a week and a nurse for the five weekdays. Recently, the nurse had stopped going and the doctor would arrive once a month.

In the San Isidro Health House, the infrastructure is good; although it is beginning to deteriorate, it has not been in use for long. It has beds, an examining room and benches for the patients who are waiting. The house has deteriorated somewhat; it does not have water or electricity.

According to the residents, in the last three years, the quality of the care has varied. First, a health house was built and left abandoned. Later, for one year, a doctor received patients but was replaced by another who was an alcoholic and was removed. The situation improved with the arrival of the full-time nurse, but now he is not showing up, and no one has explained to them what has happened; the people assume that it is because of budget problems.

The Service that They Want

"I would like the Health Post to be painted in beautiful colours and for good care to be provided because now it takes a long time..." (person from a semi-urban community). From the statements of the people, one can infer a lack of quality and warmth in the care and services provided. The users ask for better hygiene in the facilities, and friendliness in their treatment. Moreover, they ask to be given their health care cards nicely; "They shouldn't throw them at us...", when the health care staff arrives late to begin receiving patients and find the patients waiting to be attended.

A reflection that summarises one of the key points of the process and that would improve care is "I think they know what they studied, but they do not know how to treat people..." There is a need for a process to sensitise the health care staff and to ensure "that they have a vocation for service..." as an official from the municipality of El Tuma - La Dalia expressed.

The population has made complaints and proposed concrete measures that could contribute to improvements in the quality of health care. "One doctor should see adults and another should see children and pregnant mothers..." (person from the semi-urban community).

When medicines are scarce and they are not given to the users, there is no alternative but to suspend treatment, because many families do not have the resources to purchase medicines.

Other users perceive the scarcity from another point of view: "Previously, there were no options, now there are a few..."; "Before, the treatment was worse. Now it is getting straightened out, it is stricter, they are requiring them to treat people..."; "It has improved a little, because we have gathered signatures and we have complained..."

Level of Trust

According to the residents, the level of trust in the health facility staff varies. In some cases, it is high and in other cases, it is low. The way that the health staff perform their jobs indicates how the users are treated. The users' level of trust in the service they receive is based on this and the openness of the staff toward the patient. "Because we have to tell them everything about our health..."; "Yes, there should be trust, even though it takes a while to be seen..."; "I have a lot of trust in them, because you have to explain it to them for them to help us..." To a certain extent, an attitude of hope is expressed that the health service that residents receive will help them to resolve their health problems because otherwise, the patients think that they will be helpless in the face of these health problems, because they only have one option for receiving care.

Others argue the opposite, indicating a level of decreasing confidence, "Very low, but you have to go anyway, because that is where you get the referral..."; "You go with distrust because you don't know the person..."; "Up to a certain point, they only give us pain pills..."; "It takes all day to go to the health post, it is better for people to buy a pill and take it..."

In other cases, the people opt to not go to the health post or health house because of the lack of medicines and the care they are given. "I am not going because use an entire day to be treated..." (a mother in El Tuma who has not gone to the health post for six months).

The level of trust is also associated with the economic resources that are available. "There is almost no trust, if you do not have money, you die...."

Special Measures for the Inclusion of the Poor

In El Tuma, some specific medicines for medical treatments are not available in the health post. In cases of extreme poverty, the municipal government provides support with medicines that families cannot afford and assists in transporting emergency cases. "You ask in the mayor's office for help with transportation, medicines, exams or specialists for these people...."

Another special measure is care for pregnant women and children that are at risk of malnutrition. They receive cereals through the World Food Programme (WFP) to recover from the condition in which they are found. To detect these cases, weight and height monitoring is conducted in the community, led by the volunteer health worker.

Care is provided to children from zero to five years of age in La Aduana through the Community Health System (SICO) for treatment for parasites, vaccinations and the provision of vitamins.

System for Registering Complaints

Currently, community members offer their opinion about the health services through the local Citizen Power Council (CPC) and the municipal health committee. The women's organisation of El Tuma has used these mechanisms to request improvement in the situation of health care services.

The users suggest a training session for the doctors on how to treat people. Another mechanism is to complain to the director of the health centre; this results in a slight improvement in the treatment that people receive. "When there are complaints made, things improve..." In addition,

volunteer health workers are used; "At the local level the volunteer health worker is informed, and that person accompanies us so that we are seen..."

Behaviour of Health Care Workers

The treatment of users leaves much to be desired, not only because of the way patients are treated, but also because of the absence of services (La Aduana) and the lack of continuity due to the lack of medical personnel (San Isidro). "There is not much care for the people, the doctors and nurses are very touchy, they are very disorganised; a lot of people come in from far away and do not get seen..." Some patients say that "the times that I have come I have been seen, I have not had any problems..."; others say that "they have a bad way of treating people..."; "It is a waste of time because they do not see us and we have to lodge complaints..."

The key to the attention provided patients, in general terms, is that there be empathy and that the health care staff try to provide friendly service and show interest in the health problems of the people who go to the health post. If the patients do not receive good treatment, then they do not have trust in the doctor to confide all the symptoms or health problems that they have. "The service is okay; at times they are good-tempered and other times they are not. Some doctors treat you with care, others are angry with you. The medicine is provided free when it is available; they take a box out from under the desk and give it to you. Other times, they say that there are no medicines..."; "The service is bad, at times they chew us out, but we have to put up with it because of the need that we face..."

In El Tuma the majority opinion of those interviewed was that the service offered in the town is negatively perceived due to the behaviour and performance of the health staff. "Those who receive us are rude to people; some times, those who arrive first are the last to leave..."; "They have no love for their work..."

The combination of high turnover of doctors, the limited experience of some of them and the absence of others is not to the liking of the users, who go to the health posts hoping to find a solution to their health problems. "They do not have enough experience, they are very young, they are just starting..."; "For me, they are good, but they need more skills for dealing with the patient..."; "The times that they have seen us they have helped us, even though at times they come late and they leave early, it is always the same..."; "Yes, they are qualified, the problem is the wait to be seen..."; "Some have experience and others do not..."

It seems that there are not enough health care workers in the health post. This is because sometimes not all the staff report to work and there are no explanations for this. Consequently, with a lot of patients waiting and without enough health care personnel to attend them, the situation becomes chaotic. "At times they come at 9 am and close at 3 or 4 pm, and they are not putting in their hours, because they travel in from Matagalpa and arrive late..."; "More people are needed and they need to arrive on time..."; "There are not enough of them, at times there are two or three doctors, but many times there is only one..."; "Sometimes they arrive very early, sometimes they arrive late, at 11 am and they leave at 5 pm..."

The users think that supervision temporarily improves the situation. "Supervision is good because the service improves...." Although there are also doubts and misgivings about that, "They know when the supervisor is coming and that day they do their best

In San Isidro, there are few opportunities to be seen by the health care staff; only three times a week. The nurse does come for the full time and treats people well, even though he is not trained, according to the people.

In La Aduana, currently there is no doctor, only a nurse and she does not have enough time available, only one day a week.

Family Planning

It is clear that family planning is becoming more important to the families. There is a decrease in the number of children in each nuclear family and, although some men do not like this tendency, they are gradually assimilating these changes. It is important to point out that the men do not know much about family planning methods, because the women are generally the ones who "plan" and the men are either unaware of it or simply do not know much about the topic and accept the decisions of the women. However, during the interview they showed interest in learning about them. One obstacle to going to the health centre to learn about this topic is the delay in the attention, which serves as a justification or pretext for avoiding visits to the health post.

Inappropriate Behaviours

Little inappropriate conduct was pointed out by those interviewed. "Sometimes they see who they want to see..."; "A doctor threw us the medical cards and told us to pick them up..."; "A homosexual doctor only saw the men and not the women or he treated them badly..."; "He spent one day only weighing and measuring the height of the children and did not see other patients, he left them waiting..."

Appropriate Behaviours

The people gave recognition to the health care staff that, according to the perception of the users, have contributed to health care because: "They have given us some experience through the talks..."; "There was a doctor who gave us good examples and asked us to help in the community..."; "On some occasions that I have taken my daughter or son there, they have given them medicines and cured them...."

Community Participation (Community Service for the Health of the Residents)

The work of the community health volunteers is perceived positively. "It is a good service because they give us advice when we are pregnant; they support us with their presentations..."; "They weigh the children, give presentations; it is good; they know their job..."; "They help us so that the children monitor their weight and the pregnant women have their record cards every month..."; "They tell us about activities and treat us well..."; "Some empirical midwives are not trained, the volunteer health workers are trained and they know what to do..."; "It is important because they give us advice about issues such as cleanliness..."; "They make an effort, struggle and are concerned, but can do little with the health post where, when they tell people that there isn't any, there isn't any..."; "When we are sick, the volunteer health worker helps us go to the health post..."

The health care volunteers request help when a patient does not have resources for travel to the municipality to seek medical attention in an emergency or to pay for transportation of a sick person. The health care volunteers convene the residents to participate in clean-up campaigns, they attend the meetings to weigh children and to provide prenatal care for pregnant women, they provide training on personal hygiene and hand washing, and they participate in fumigation and the control of vectors.

Only in the case of the community of San Isidro is the participation of the community in health care incipient. Generally, they organise for vaccination campaigns, convening the population and supporting the health care personnel. In the other communities studied, there has been participation over the long term.

Community participation is important, not only to understand health issues, but also to support the health activities that the volunteers promote. This participation is not very well organised and is very dependent upon the situation, even when the population recognises that participation and organisation are key. "Because it is our duty to be organised, if not the children may die..." Another resident states that, "Organisation is difficult but it must be supported, it is the only way to take care of health..."

On the other hand, the treatment by community health workers is perceived positively: "There is good treatment..."; "She gets involved with the people and we should agree to work together..."; "The volunteer health workers have motivated us to attend the presentations and to take care of the health of the children..."

Domestic Violence

There have been cases of domestic violence in the communities. In El Tuma, a promoter who was trained by the Matagalpa-based Women's Executing Commission (in the Office of the Special Ombudsman for Women's Human Rights) attends to these cases. Some female interviewees indicated that they did not want to become involved in this issue, but they look favourably upon the legal and psychological support that is provided in the cases that arise.

The health post or health centre plays a very important role in these cases, as it issues the corresponding medical opinions. Some persons, however, consider that "...the health care personnel have not been trained to deal with this problem." The previously mentioned promoter is recognized as the person who knows about the issue, and she is the one who takes immediate action.

The situation is quite delicate, as there have been cases of rape, sexual molestation of minors, sexual abuse and threats against women and children. The services offered include psychological accompaniment, medical forensics, legal advice and representation, and the reporting of the incident to the police. Thus far this year, 23 complaints had been filed. Of these, 15 were cases of rape (nine of these cases are being investigated; five have resulted in arrests; and only one case is being prosecuted by the Public Prosecutor).

"Many of these cases are settled out-of-court when they get to the judge..." (Promoter of the Women's Implementing Commission in the semi urban community).

In La Aduana, the Ministry of the Family (MIFAMILIA) has responded to some sporadic cases of child abuse. Wife battery occurs with some frequency, but there is a reluctance to report these cases due to a fear of future retaliation from the spouse. "A resident filed a police report of wife and child abuse by a man in the community, but when this family heard that the police were coming, they left town before the police arrived..."

Traditional Medicine

There is extensive use of traditional or alternative medicine in the communities. In some cases, this due to habit and custom and in others it is due to a lack of economic means to purchase the medicines that have been prescribed and complete the treatment. "Sometimes, when not seriously ill, I use medicinal herbs...." "Yes, I use herbs, in teas, because I don't have the money to buy medicine...." "When there are no medicines, we prepare home remedies...." "When you see what little they give you in the health post, you have to resort to other medications -- to roots and herbs...." The population does not acknowledge the existence of healers as such, but does recognize that there is popular knowledge about medicinal herbs and that older persons have a greater understanding of herb craft. For this reason, the population uses herbs such as eucalyptus, lemon grass, oregano, orange leaves, mango leaves and guayaba leaves, avocado pits, guayaba shells, chamomile, and other herbs to treat their illnesses.

III. Synthesis and analysis of participation, non-discrimination, transparency and accountability (PNTA)

In this section, we use the Sida (PNTA) framework, which includes participation, non-discrimination, transparency, and accountability, to analyze some of the key issues that have arisen in this study. The PNTA frame was developed by Sida to provide guidance in implementing two perspectives that are promoted in Sida's global development policy: the "rights perspective" and "poor people's perspectives on development" ⁴.

III.I Participation

Sida views participation "...as a goal in itself, and a way to increase the awareness of those whom the assistance is intended to reach, increasing their influence, so that they can demand change and social justice..." And holds that "...participation both in decisions that affect private life and the governing of the country is a human right...." ⁵

Based on what inhabitants stated during the study, it can be concluded that there is a high level of awareness of the existence of health care and rural productive development programmes, mostly under government control, and of other organisations, such as NGOs or non-governmental programmes or projects, that promote popular health care as well as improved production for rural farmers and families. However, the level of influence the population has upon the content, form of delivery and beneficiaries of this support is extremely low. The community dwellers, particularly those most excluded, have no participation in decision-making related to the health or rural productive development programmes. These persons have very limited ties to the service-providing institutions and therefore do not have the capacity to influence what the programmes do or how, where, or with whom they do it.

It is interesting to note that most of the health and rural productive development programmes consider themselves to be participatory and present themselves as such. However, the level of consultation for decision-making is extremely low, and the social audit initiatives for these programmes are still incipient. For its part, MINSA has indicated that this year it will begin to implement social audit activities for medical care . MAGFOR, on the other hand, is attempting to include farmers in the planning of PRORURAL's annual activities, although on a limited scale that does not include the smallest and poorest farmers.

In general terms, the poor people, the excluded and those who are not organised, do not exercise any influence in the programmes; the demand for change and social justice is quite limited. It does not seem that the population believes it has an established right to participate in these decisions, but rather that this is something yet to be achieved and requires a struggle, or that is a kind of favour granted by the government.

In the communities studied, there is participation in the volunteer work of the health promoters (brigadistas de salud). The women, in particular, are aware of the importance of caring for family health and of the important role community participation plays in health. For this reason, the women support the community health promoters and participate in activities designed to improve family health. Through this participation, they attempt to influence local health care establishments to improve services, albeit without the desired results. Moreover, this participation is further limited because the majority of the residents are not fully familiar with the new Family and Community Health Model (MOSAFC) that MINSA is promoting. Therefore, they do not know how the different components of this model are linked or what its programmes are and how they function within the health units. Although the new model stresses community participation as indispensable, the population has not yet been incorporated into its implementation, which is to the detriment of the health care of the beneficiary families. So far, participation has been limited to accompaniment or some contribution to the implementation of certain activities within the health programmes; there are no mechanisms that promote participation in decision-making.

Currently, the population's concerns or complaints (which are constant) regarding care in the health posts, is channelled through the community or municipal health committees or through the local CPC. The government has prioritised participation through the CPC's as it considers that through this body citizens may directly participate in the organisation and functioning of general community affairs. This has meant a reduction in support for other mechanisms of participation and a favouring of the CPC's, which many citizens consider to be partisan and politically manipulated.

Because of the relevant role that citizen participation is given in the process of transforming the health system and its positioning in the territorial structure, the MOSAFC promotes citizen participation. This takes into account that which was established in Act 475, The Law of Citizen Participation, which defines participation as "... a process of individually or collectively involving social actors with the purpose and end of having an impact upon and participating in decision—making, the formulation and design of public policy at the different levels and modalities of territorial administration and public institutions, for the purpose of achieving sustainable human development in joint responsibility with the State..."

With regard to the production support services, there is greater participation by the cooperative movement and farmers who are members of producer organisations, especially for improvements in technology and production. These groups are linked to the programmes and projects, are listened to, and receive the greatest benefits the programmes offer. A second sector, comprised of small landowners who are not organised in cooperatives, have no mechanisms for participation unless they belong to a producers' association. This group usually does not have a high level of participation; has limited access to financing, training and technical assistance; and must use personal resources to improve production. A third group are those farmers who have access to only 0.7 to 1.4 h of land or do not even have access to that and must lease the land. This group usually has virtually no technical or economic support because they are considered ineligible for credit or service due to their small size or to not owning the land. The farmers from this group are subsistence farmers

⁵ Ibid., p. 9.

⁶Central America and the Caribbean, held in mid-August in Managua, the Secretary General of the Ministry of Health, Dr. Enrique Beteta, stated: "...we shall jointly meet the challenges both of contributing to social control, to social audits, so that we will not have cases of human error in medical care, and of planning actions that will ensure quality care for the populace. We must raise awareness among our brothers and sisters that we need to talk with the patients."

who use their own limited resources to produce just enough to feed their families, a task that is becoming increasingly difficult. Using outdated technology and less-than-optimum inputs, they find the productivity of the land they sow to be plummeting. A fourth group are the field wage-labourers. The overwhelming majority of these, with the exception of those who work for the big companies, are the most unprotected because their receive the minimum wage or less, are not covered by social security or medical insurance, and usually have seasonal employment. Most members of the latter two groups form part of the population living in extreme poverty and are those who have the least participation as beneficiaries of the available support and services, with the exception of the Zero Hunger Programme, which serves a limited number of persons in the studied communities. These two groups do not participate at all in decision-making.

III.2 Transparency

Sida maintains that "...In order to hold decision-makers at local or central levels accountable, citizens must stay informed..." and that "...the right to information is a condition for active participation..."

It must be pointed out there are not many decisions made at the local level, for either the health-linked support or services in the H/P or for productive development. With regard to health, the urban and semi urban community dwellers have a nearby H/P where they can contact MINSA personnel. The rural community dweller has a health house that receives visits from ministry personnel and may express his/her opinions or complaints to that staff member. On the other hand, with regard to productive development, there is no nearby presence of MAGFOR or PRORURAL representatives in any of the three communities. The contact is mostly limited to sporadic visits from extension agents, mainly in El Tuma. The information that the population has about existing projects, programmes, and services is quite limited and is based upon what they hear repeated by other persons; it is not the result of a systematic dissemination plan. In comparative terms, the population of El Tuma is the most favoured with productive development assistance and support; La Aduana receives some; and San Isidro receives no support.

There is also a tremendous difference between the public policy (set forth in MOSAFC), the limited services that reach the population, and the real local needs existing in the three communities.

The abovementioned conditions are a tremendous barrier to the population's active participation.

To be more specific, the population's health and production support needs are not covered in any of the three communities. Nor is adequate information provided to the service users so that they may know what to expect from the government or from other nearby interventions. They have no opportunities to participate in decision-making regarding the type of assistance they need, the hours of attention, the availability of medicines, the availability of lab tests or exams, emergency care, technical assistance, credit, membership organizations, or other aspects.

In the health sphere, there is a set of primary health care programmes directed at the poor in the framework of the new model of care. However, there are implementation problems with the programmes, due to the lack of medical human resources and the deficient treatment by personnel as well as the lack of medicines. This causes disillusionment among the users: they are informed that health services and medications are free but, in many cases, they do not receive any medications to treat their illnesses and are given prescriptions to buy the medications, which are not available in the health facility.

In contrast to the reality described herein, the MOSAFC promotes citizen participation, as established in Law 475 on Citizen Participation. The MOSAFC further states that "...that to responsibly exercise citizen participation in local development, there are different decision-making arenas at different geographic levels, such as community councils, territorial networks, Citizen Power Councils (CPC), village cabinets, and national, provincial, regional or municipal roundtables that make it possible to plan and co-execute actions and to develop social control..."

If what is proposed by MOSAFC were implemented, it would significantly increase the participation of the population in decision-making at the local and central level, improve accountability to the public and keep the citizens well informed.

III.3 Non discrimination

According to Sida: "Excluded, marginalised and discriminated groups must be given special attention, and must be identified."

It cannot be said that there is a policy of exclusion of these groups in the health care provided to the studied population, but for diverse reasons, basically economic, the poorest and most excluded who live in rural areas have fewer possibilities of receiving care from a doctor, even in cases of emergency. Moreover, they invest a higher percentage of their income in their health care. The poorest groups have few resources to access the H/Ps that are located in the municipal seats and even fewer to receive hospital care in the provincial capitals. The purchase of medicine is beyond their means, thus they resort to traditional medicine. When they, or members of their families, have a serious illness or an accident that requires medical care they must rely on family or community solidarity to meet the transportation and medical costs that they cannot cover with their income. It was observed that these groups demonstrate a high level of solidarity and that, in spite of limited resources, each makes an effort to help or contribute when these situations arise.

In terms of support for production, the programmes and projects prioritise service for farmers who are members of cooperatives or associations. For each, a number of activities to assist production are carried out with adequate technical assistance and with financial, seed and input support, as well as the transfer of technological packages that have been designed to meet these farmers' needs. The poorest farmers do not receive greater service. Moreover, the great majority of the beneficiaries of programmes that provide production support are men, as generally they are the heads of the families and also because the women are not given many opportunities for training and technical assistance, even though many of them also participate in productive tasks. One exception is the Zero Hunger Programme, in which female heads of households who own a minimum of one manzana [0.7 h] of land have been selected as prioritised beneficiaries. However only a few beneficiaries of this programme were detected in the three communities studied (five in La Aduana, four in El Tuma and none in San Isidro).

As a result, a significant group of poor farmers do not receive the services required to make the land produce efficiently. The programmes and projects are oriented more toward serving the farmers who are landowners and cooperative or association members, to the detriment of those farmers with small or no land holdings. In spite of this, the latter group overcomes many obstacles to procure seed and inputs. They must farm relying only on their own efforts and infinitesimal capital, at the risk of not recovering their investment and without the technical and financial assistance the other farmers have available.

Women often feel excluded from decisions related to the management of production activities because traditionally the men have been responsible for this. The men distribute, negotiate and sell the production and determine the use of the resources that come from this sale. Women make most of the decisions regarding family health, not because men are excluded, but because the men themselves believe that these decisions are the mothers' responsibility.

III.4 Accountability

Accountability by health service providers in the health care facilities must be reflected in punctuality, smooth functioning, and the diligence, quality and warmth of patient care, as well as in the information, signs and notices that clarify the procedures and coverage of the health needs existing in the communities and cities. Accountability for services to improve production refers to the appropriateness, quality, effectiveness, coverage and impact of the services as a response to the needs of the farmers.

The government must accept that it should supply many benefits and services to the poor and must assume responsibility for doing so. It must also promote other existing programmes and projects that provide support in the fields of health care and production to help address these needs, as the government cannot cover all of them. The government must ensure that these other service and support providers are held accountable.

The new MOSAFC health care model, being implemented by the current government, aims to integrate the programmes so that health services are more accessible, effective and based on a preventive approach (primary health care). This new model needs to be disseminated for all users to fully understand it and the logic behind it.

In terms of accountability, the MOSAFC emphasises that "...as a result of the effective and active participation of the population, there is social control over management, which facilitates greater transparency and efficiency in the use of resources, thus achieving a greater impact of actions in health care and other sectors..."

To accomplish the goals and objectives at the different levels of the health care system, the MOSAFC indicates that "...different levels of coordination must be developed among the actors and institutions that form the health sector, and management control must be implemented based upon surveillance, monitoring, supervision and health situation evaluation processes and the development of plans to accomplish objectives that ensure compliance with the policies and goals of the National Health System..."

MOSAFC's management control tools include the Quality Assurance System, which is devised to provide a high level of health service user satisfaction by complying with technical standards of excellence with timeliness, warmth, equity, effectiveness, technical competence, safety and effectiveness. An essential condition for the quality assurance system is that the services be available to individuals, families, and communities through the network of public, private and community services with broad citizen participation. A care quality audit is one of the components. The quality assurance is associated with the participation of society to build linkages aimed at evaluating the processes for care offered by public and private service providers.

As with the issue of participation, the MOSAFC, in theory, indicates fairly precisely what should be done for proper accountability. In practice, the model has not been implemented.

IV. Conclusions and recommendations

The conclusions and recommendations of this section refer principally to the situation found in the three communities studied. However, given that these communities may be representative of similar situations in other communities with similar characteristics, some more general recommendations have also been added. Most of the conclusions and recommendations refer to the health services, given that services to support production were nonexistent in one of the studied communities and very scarce in another.

IV.I Conclusions

- Health care services and support for production do not prioritise people who live in extreme poverty and excluded people, especially those that live in communities that are most difficult to access; they do not feel served.
- The reality check indicates that the opportunities that persons living in extreme poverty have to access health services and support for production are more limited than are those of other social groups (the poor and non-poor). The only health care options in the communities are MINSA services, self-medication, and traditional medicine remedies. There are government programmes or NGO projects for production support in only two of the locations. With few exceptions, these programmes work only with farmers who belong to cooperatives or associations; they do not work with smallholders, the landless or with tenant farmers. Women's participation in the agricultural programmes is quite limited.
- Farmers and poor residents feel dissatisfied with health care and services and the support for production programmes and projects; they think that the content, opportunity and quality of the services that are accessible do not fully satisfy their needs. They report that in many cases, they must use their scarce resources to pay related costs, mainly for medicines and inputs and technical assistance for production support.
- In recent years, important progress has been made in the health sector. However, the progress is more pronounced in population groups with a higher economic income, and thus has widened equity gaps. Furthermore, many poor people must pay for medicines and other health needs with their own resources. This significantly affects their income, as it is a substantial proportion of it.
- Due to the limited availability of medicines, many inhabitants must pay out-of-pocket for drugs and other health needs. In comparison with other social groups, it is estimated that these expenditures represent a higher proportion of the poor population's income and have a grave effect upon household income and standard of living. Long distances and limited availability of medicines in health units, the high cost of these medicines and other factors (such as self-medication) constitute the main reasons for which poor persons abstain from seeking care in the public services and recur to informal methods of health care.

- In the rural health facility studied, the service is irregular; it is, in practical terms, mostly in the hands of the health volunteers. For many reasons, including distances, low salaries, and difficult working conditions, among others, the doctors and auxiliary personnel do not comply with the visitation calendar or work schedule, forcing patients to travel long distances to other health units to seek care.
- There are significant initiatives for participation in all the communities, as shown by the volunteers, health brigades, municipal committees, CPC, etc. However, most poor people in the communities studied still lack the opportunity to participate in decision-making related to the government programmes for health and support for production. They receive no information on the content, coverage, scope and procedures of the services, and the government does not have effective accountability mechanisms, which in turn affects the transparency. Poor people have few reliable mechanisms for participating in the control and evaluation of government services and fewer yet for proposing improvements in them. It must be noted that there are government initiatives to increase citizen participation and auditing that have been defined and designed, but not yet implemented. These include the proposals set forth in MINSA's MOSAFC and PRORURAL's territorial planning.
- It is important to point out that there is strong solidarity shown among the poor, which enables them to help each other to face problems that arise, both in health matters and in the development of production. As health brigade members, they contribute their time and efforts to attempt to solve problems in their communities; in difficult or emergency cases, they contribute their scant resources so that affected persons may reach health care facilities. Vis-à-vis productive work, they exchange information or train one another on how to grow certain crops or respond to the pest or technological problems that affect them.
- Over the past 15 years, Nicaraguan health sector indicators have shown significant general progress. Access to basic services, the supplying of potable water and sanitary installations have improved, as have other sector performance indicators: increased life expectancy, reduced mortality rate for children under 5 years of age, reduced malnutrition among children over 5 years of age, higher immunisation coverage rates, among others. However, these improvements have had the greatest impact among higher income population groups, thus widening the equity gaps. Serious inequalities in access to and quality of health services persist among different socioeconomic groups and territories. In general, poor people who live in rural areas and the members of families who support themselves from agriculture have less access than the average populace to health prevention and care. Rural poor persons have fewer probabilities of receiving care from a doctor, even in cases of emergency. The higher the level of rural poverty is, the worse is the persons' health

IV.2 Recommendations

- Authorities from the MoH and public sector agricultural agencies (SPAR) that are responsible for actions related to health and productive development in the communities studied may use the results presented in this study to take corrective measures regarding the unsatisfactory situations disclosed.
- Measures must be taken to reduce the current disparities in health care and to cover the needs of the poorest and most vulnerable sectors of the population. To this end, intense effort should be made to achieving two of the GRUN national plan for human

development objectives that are related to health: "develop a national culture of preventative health promotion" and "guarantee universal access to free quality health services." Priority must be given to the access, delivery and financing of basic health services to the poorest sectors of the population. Research must be done on how to direct more resources to primary care, prevention, and the promotion of health interventions and how to strengthen results-based local budget allocations.

- The implementation of MOSAFC is fundamental to increasing participation, non-discrimination, transparency and accountability in the health sector for poor populations.
- If the situation revealed in this study is confirmed by other studies, the MoH should investigate the causes of the situation described, particularly the possible causes related to the inefficiencies in allocating and using resources and also should implement efficient health strategies that benefit the poorest people. Efforts to solve these problems should be undertaken within a framework of equity, given that poor persons do not receive as many benefits from health care advances as do the rest of the population.
- It is important to analyse and design a strategy for services that prioritises the poorest and concentrates public health care spending in the most important services to ensure coverage of their needs and improve results in health and nutrition. Selective and effective coverage is needed and should include: the application of programmes to improve coordination between sectors; the enhancement of the organisation and technical quality of services; an increase in the supply of qualified personnel, medications and other support; the implementation of actions to renew a positive attitude toward service to the population by health care personnel; and the implementation of mechanisms to ensure the effective participation of the population in health care management.
- To improve health results among the rural poor, there should be investigation of potential inefficiencies in spending on health that seem to favour metropolitan areas and hospital care resulting in the concentration of resources in Managua and other major cities.
- An analysis should be conducted of the system for allocating human resources based on historic patterns in order to seek a solution to the scarcity of doctors and nurses in health facilities in poor locations, especially in primary health care programmes and services.
- A response to all the health problems will require measures to increase the delivery of
 medical care services, particularly among the poor and the population that receives no
 care. Alternative models for delivering services that would improve access of the most
 vulnerable population groups and could be financed and regulated by the government have
 been proposed and should be studied. These modalities could include different options,
 such as outsourcing services to NGOs, strengthening MINSA health care units, the deployment of itinerant teams and the implementation of decentralised community-management
 models.
- The new production model advocated by the GRUN, in which the recovery of impoverished farmers is an integral part of the national development strategy, recommends that there be a continuation and increase in facilitating the means of production, technical assistance and financing for peasant families in order to overcome their poverty status and to restore their productive potential.

- To reduce the gap in services provided to farmers with land and those without, between the poorest and those that are less poor, PRORURAL Incluyente should incorporate service to disadvantaged groups.
- An additional challenge in this area would be to try to ensure that those farmers who do
 not have access to land be provided with this means of production with the facilities and
 guarantees that each case merits. This would extend the agrarian horizon, local production and, by extension, national production as a whole.
- The projects and programmes that receive financing from international cooperation should review what they are doing on behalf of the poorest rural population and make the adjustments needed so that this group may be included or have greater representation as beneficiaries.
- Opportunities and mechanisms should be provided to promote the participation of the population in general and specifically that of farmers in local decision-making related to health care services and support for production by the government in projects and programmes executed in the territories. Information about these services, projects and programmes should reach the population in a systematic and organised fashion so that they understand the details of the coverage, scope, and procedures. The accountability of all services providers the government, NGOs and others should be promoted, and effective mechanisms of social control and audit that are free of partisan political influence should be established. The municipal governments and citizen participation bodies must play a predominant role in all these actions.
- Reality check studies are conducted periodically to identify changes that have occurred between one study and the next. For this reason, this study should be repeated in the future to determine whether progress has been made in the delivery of health care and productive support services focused on the poor.

Annex no. 1 Description of the communities participating in the study

Province: Matagalpa

Municipality: El Tuma – La Dalia

Village: El Tuma / neighbourhood: San Martín

General information

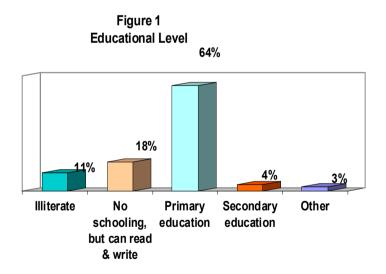
The village of El Tuma is located at km 164 of the Managua - Matagalpa - La Dalia highway. El Tuma village currently has a total of 1,679 inhabitants; 341 are under 15 years of age. The San Martín neighbourhood has 777 inhabitants

Characteristics of the families

Thirty-five percent (35%) of the families have 2 to 4 members; 45%, 5 to 8 members; and the remaining 20%, 9 to 17 members.

Composition of the families interviewed: 44% are adults (52% male and 48% female); 38% are children (42% boys and 58% girls) and 18% are youth and adolescents (78% male and 22% female).

Figure I shows the educational level of the members of the families interviewed. Most have attended primary school; a low percentage has attended secondary school; and a substantial percentage is illiterate or only knows how to read and write.



Few family members are in preschool; many children are not attending preschool or primary school due to economic reasons (lack of money to pay for school uniforms and supplies).

Of family members who work, 57% are adults; 33% are women, and 10% are youth and adolescents.

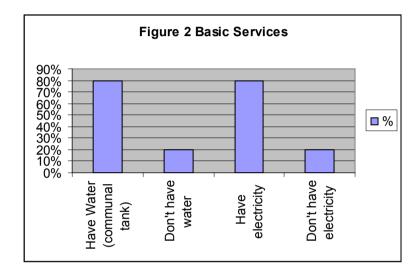
Reported family income: 80% (16) of the families report an income between c\$ 1,000 and c\$1,500 córdobas; 15% (3) have an income between c\$2,100.00 And c\$3,000 and 5% (1) report an income of c\$4,000.00.

Characteristics of the dwellings

Dwelling walls: 90% (18) are made of wood (milled or rough board), 5% (1) of brick, and 5% (1) of plastic. Most dwellings have a dirt floor.

Roofs: 85% (17) are roofed with zinc, 10% (2) with zinc and plastic, and 5% (1) exclusively with plastic.

Basic services: 80% of homes have electricity (all through illegal connections), and in 20% it was not possible to make the connection. About 80% of households have piped water that is taken from a communal tank, and the remainder use community outlets. See figure 2.



All the homes have their own latrines, but most are rustic and built of wood and plastic.

Thirty percent (30%) of the houses have 2 rooms (living room and bedroom) with a kitchen outside the house; 50% have 3 rooms (living room, kitchen and bedroom); 15% have 4 rooms (living room, kitchen and bedrooms); and 5% have 5 rooms (living room, kitchen, porch and bedrooms). All of the lots are spacious (from 1500 vara [1048 m] to ½ manzana [0.35 H]).

Fifty percent (50%) of the houses have good hygienic conditions; the conditions of the other 50% are fair. In several houses, dwellers cohabit with domestic animals (chickens, dogs, ducks and pigs).

The security of the houses is not very good, because the dwellings have been built with inadequate materials.

Other aspects:

The road is in poor condition from Matagalpa to the entrance to the village of El Tuma and is unusable from that point to the San Martín neighbourhood. The neighbourhood stretches along the road for two kilometres, from km. 164 Through km. 165.

One hundred percent of the families interviewed own the land on which they have built their houses. Only a small percentage of them own land for farming; 50% lease land for planting.

Most of the families own poultry; some of them have received these assets as beneficiaries of government programmes. Three of the beneficiaries possess farmland and have domestic animals (hens, roosters, longhaired sheep, cows and ducks).

Most of the families interviewed stated that they eat beans and tortillas every day and cheese, coffee, rice, chicken and plantains, when they are available

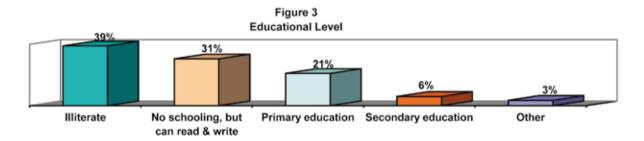
RAAS / Nueva Guinea / La Fonseca San Isidro (rural community)

Characteristics of the families

Fifty-five percent (55%) of the families have between 6 and 10 members; 25%, 5 members; and the remaining 20%, fewer than 5 members.

Forty-two percent (42%) of the population is adult; 41% are children; and 17% are youth and adolescents. The adults and adolescents and youth are equally divided between men and women. Among children, 65% are boys and 35% girls.

Figure 3 shows the educational levels of the families interviewed. Thirty-nine percent (39%) of the population is illiterate; 31% only knows how to read and write. The remaining 30% has studied in secondary schools, normal schools or the university level.



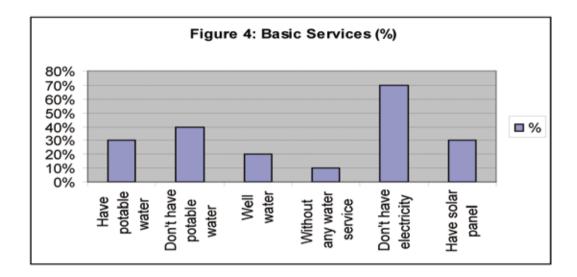
Of the family members who work in agriculture, 67% are adults; 20% are youth and adolescents; and 14% are children.

The male and female farmers' income was calculated based on the expenditures made for food and other products that are bought for personal use and production. Thirty percent (30%) of the families have an income of less than c\$1,000.00; 50% Have incomes between c\$1,200.00 And c\$2,000.00; And 20%, between c\$3,000.00 And c\$5,000.00.

Characteristics of the dwellings

All (100%) of the dwellings have dirt floors and walls made of wood. Eighty-five percent (85%) have roofs made of zinc and wood; and 15% have roofs made exclusively from wood.

Seventy percent (70%) of the dwellings have no electricity, and 30% have solar panels. Thirty percent (30%) of the families have water that is carried by a hose from a natural spring. (A community effort established this water system.); 40% Get water from a creek; 20% use well water; and 10% do not have service. See figure 4



Sixty-five percent (65%) of the houses have three rooms: a living room, a bedroom and a kitchen. The other 35% have only two rooms: a living room-kitchen and a bedroom. Fifty percent (50%) of the lots are spacious, 35% are moderate, and 15% are small.

Sixty percent (60%) of the dwellings offer fair health and hygienic conditions. Most of the dwellings also house domestic animals (hens and pigs). In 80% of the houses, safety conditions are fair to poor; the houses are made of boards, most of which have been damaged by moisture.

Other aspects:

The road is in very bad condition. During the rainy season, it is very difficult to transport the harvested crop to the river, and the only means to do so is by pack animal or by foot. The clay soil further complicates the process.

There is no local public transportation. During the dry season, a few traders from La Fonseca or Nueva Guinea come in with vehicles to sell products and/or buy crops.

Eighty percent (80%) of the families own land, and 20% farm on leased or borrowed land, although they have their own homes. Eighty-five percent (85%) of the farmers cultivate from one to nine manzanas [0.7 To 6.3 H] of land. Fifteen percent (15%) have between 40 and 100 manzanas [28 to 70 h], but only farm part of their holdings. The rest of their land is left fallow due to a lack of economic and technical resources. There is no water for farming; they only sow during the second planting cycle of the rainy season.

Sixty-five percent (65%) of the families own horses, and 35% have cattle. One farmer has 40 cows, another has 20 cows and calves, and the others have from one to three cows. Ninety-five percent (95%) have chickens (42% have between 10 and 45 hens and male chickens, and 58% have fewer than 10 hens. Seventy-five percent (75%) own an average of two pigs; and one family has 12 pelibuey sheep.

The normal diet consists of rice, beans, tortillas, eggs and cheese, taro, purple yautia, cassava, plantains, coffee, cooking oil, sugar, and beverages made from oatmeal or oranges and limes, when they are in season.

Province of Chinandega Municipality of Somotillo Community La Aduana (urban)

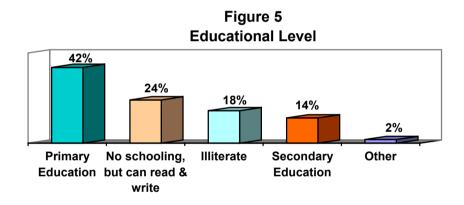
Characteristics of the families

La Aduana, El Guasaule, is a community located in the northern part of the municipality of Somotillo, in the province of Chinandega. The national institute of development information (INIDE) classifies it as an urban community with a high level of poverty.

There are 557 inhabitants; 54% of the population is under 15 years of age; and 53% are women.

Fifty-five percent (55%) of the interviewed families have from six to 10 members, and 45% have from three to five members. Forty-seven percent (47%) of that group are adults; 32% are children; and 21% are youth and adolescents.

Forty-two percent (42%) of inhabitants have finished some primary grades; 24% have no schooling but know how to read and write; and 18% are illiterate. See figure 5.



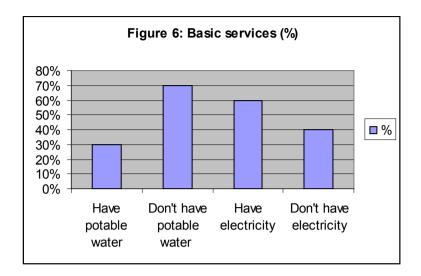
In 91% of the families, those who work are adults; of these 62% are male. In the families of the farmers who were interviewed, 80% of the adults participate in farm labour.

Fifty percent (50%) of the families have incomes from c\$800.00 To c\$2,000.00, And the other 50%, from c\$3,000.00 To c\$5,000.00

Characteristics of the dwellings

Forty percent (40%) of dwellings have adobe walls, 40% have cement, and 20% have cardboard, plastic and wood. Seventy-five (75%) percent of dwellings have zinc roofs, and 25% have clay tile roofs. Seventy percent (70%) of the houses have dirt floors and 30% have cement.

Sixty percent (60%) of dwellings have electricity. Seventy percent (70%) do not have water (they get their water from other families' wells), and 30% have their own wells



Forty percent (40%) of the houses have three rooms (living room, bedroom and kitchen); 35% have two rooms (bedroom and living room/kitchen); and 25% have a single, multipurpose space. Ninety percent (90%) of the homes have latrines.

Forty-five percent (45%) of the houses are built on spacious lots; 30% are on moderately sized lots; and 25% are on small lots.

The health and hygienic conditions of 60% of the dwellings are fair. Most houses are shared with domestic animals (dogs, hens and pigs). A great deal of dirt, trash, puddles, and flies were observed, although the dwellers stated that they had received talks about health habits and food handling.

Sixty percent (60%) of the dwellings have fair security conditions; 20%, good; and 20%, bad. The dwellings have holes, and the doors and windows are built with very weak materials. Some of the houses are open air. There is a great deal of overcrowding; children and adults sleep in the same room, and in many houses, the spaces are very small.

Other aspects:

La Aduana is located on the border between Nicaragua and Honduras, and the international highway divides the town in half. Vehicle traffic is intense and there are diverse transportation options (buses, bicycle-taxis, and taxis). The streets in the village are in bad condition; there are many puddles and a lot of mud throughout the rainy season.

One hundred percent (100%) of the families own their homes. Ten percent (10%) of the farmers work on leased or borrowed land; 25% of the families cultivate areas ranging between 0.5 And 3 manzanas [0.35 To 2.1 H]. They do not have water for irrigation.

Forty-five percent (45%) of the families have hens, 15% have some cattle, and 10% have horses and pigs.

The families' ordinary diet includes rice, beans, eggs, cheese, cooking oil, sugar, chicken and beef, when possible, and seasonal fruits.

4)

Main Indicators

						Population Indicators	ndicators			
Community	Number		Number of men	Number o	Number of women	Last childbirth not	%	%	%	%
	inhabita nts	<15 years	<15 years <u>></u> 15 years	<15 years <u>></u> 15 years	≥ 15 years	care institution	IIIIteracy Men	IIIIteracy Women	IIIIteracy Men 14 – 29 years	Illiteracy Women 14-29 years
El Tuma	1220	273	355	234	358	85	33.6	36.1	27.1	28.4
La Aduana - El Guasaule	721	141	204	161	215	55	28.3	25.1	23.2	14.5
San Isidro	319	92	91	72	80	30	47.1	35.5	37.3	23.1

	Total Dwellings	vellings			Dwelli	Dwelling Indicators (number of dwellings)	umber of dwell	ings)		
Community	Number of dwellings	Number of dwellings w/ occupants	Inadequate walls	Inadequate roof	Dirt floor	Inadequate dwelling	Inadequate No electricity No potable dwelling water	No potable water	Non-owner (leased or borrowed)	Distance to nearest H/C > 5 km
El Tuma	270	225	153	49	158	139	79	91	32	58
La Aduana - El Guasaule	176	144	77	1	93	89	48	142	22	19
San Isidro	55	20	49	4	37	37	20	48	1	49

						Honsehold	Indicators (Household Indicators (number of households)	(splodes)				
Community	Househo Ids	Male head of househol d	Female head of househol d	No WC	Shared WC	> 4 persons per bedroom	Cook w/ firewood	Cook w/ No garbage firewood collection	No residential telephone	Persons with Economic disabilities ally active	Economic ally active	With international migrants	Receive remittanc es
El Tuma	229	166	63	49	9	115	500	137	224	19	9/	18	9
La Aduana - El Guasaule	150	104	46	54	16	77	132	121	146	12	0.2	22	11
San Isidro	88	80	8	35	4	34	26	83	09	3	17	5	2

		Poverty Level (%)	-evel (%)		Distribution of extreme poverty	extreme poverty
Community/ Hamlet	Not living in poverty	Living in poverty, but not extreme poverty	Living in Living in actreme poverty extreme poverty	Total	Number of households in extreme poverty	Population in extreme poverty
El Tuma*	11.2	19.8	69	100.0	929	3771
Aduana El Guasaule	21.3	30.0	48.7	100.0	22	068
San Isidro *	2'9	21.5	71.8	100.0	1095	7269

* Data refers to El Tuma and surrounding rural hamlets

** Data refers to the hamlet of Fonseca, in which the community of San Isidro is located.

					Education	Educational Indicators (number of persons)	number of per	sons)				
Community	Attending	Attending	Attending	Attending	Did not	Did not	Attending	Attending	Attending	Attending	Did not	Did not
	primary		primary	primary	finish	finish	secondary	secondary	secondary	secondary	finish	finish
	school		school	school	primary	primary	school	school	school	school	secondary	secondary
	Males		Males	Females	school	school	Males	Female	Males	Females	school	school
			(Age)	(Age)	Males	Females			(Age)	(Age)	Males	Female
			6-12 yrs	6-12 yrs					12-18 yrs	12-18 yrs		
El Tuma	11	91	99	02	44	41	42	23	26	28	62	61
La Aduana -El Guasaule	89	75	99	09	27	32	26	24	18	22	44	37
San Isidro	24	31	15	19	16	13	9	6	4	7	4	6

				Educational	Educational and Economic Indicators (number of persons)	Indicators (nun	iber of persons)						
Community	Attending school/university Males 17-29 yrs	Attending school/university Females 17-29 yrs	Population with university degree	Economically active population Male	Economically active population Female	Economically inactive population Male	Economically inactive population Female	Perman	Permanent employment Male Age group	yment	Perman	Permanent employment Female Age group	ment
								10-14	10-14 15-29	>30	10-14	15-29	≥30
El Tuma	9	4	3	169	59	280	398	1	17	42	3	19	56
Aduana El Guasaule	1	9	1	176	06	82	185	3	43	20	2	32	35
San Isidro	•		2	73	7	46	103		1	1	-	2	3
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Source: INIDE, Municipios en cifras. 2008 / Información basada en el VIII Censo de Población y IV de Vivienda.