

CHAPTER 6 SELECTION OF THE PRIORITY AREAS

6.1 Selection Basic factors

The proposed programs will be appraised economically and technically (Study of Viability) to demonstrate his suitability. After that the execution process will be drifted. As the accomplishment of this study in the whole study area would demand great amount of financial resources and time, typical municipal districts will be selected among the 38 municipal districts, where they will be accomplished the Study of Viability. Later they should be accomplished the same study in the municipal districts remained.

The framed projects in the program have as purpose to support the agricultural production that they be accomplished by the own producers as: Great and medium producers, the plan of cereals introduction, Micro and small producers the activity of the Nucleus of Production and in general way to the all the producers the livestock activities (diversification and intensive production) and of Environmental Conservation. Inside of these parameters the need of the choice of the municipal districts for the development plan for activity.

Due to north area to be located inside of the Amazonian legal area, the activities of environmental conservation will be necessary and common to the whole area, therefore it won't be considered. As well as, due to solid predominance of the cattle activity translating in the need of improvement plan of this activity to the all the producers won't also be considered. Therefore the considered areas will be those destined to the cereals introduction and installation of the production nucleus activities.

For the priority areas choice in agreement with the proposition for the cereals production or development of production nucleus activities, being taken into account the natural and social conditions, besides it analyzes of use of the earth proposed by GIS, the areas of larger aptitude for the chosen activities were established according: 1. Producers intention and opinion. 2) Result of demonstration 3) Expectation of larger answer to the development plan and easiness of attendance.

6.2 Municipal district suitability

The each municipal district suitability in agreement with the aptitude of the soil, steepness of the area, potential of use of the earth, distribution of the producers and analyze for GIS, for the Cereals Introduction and development of Nucleus of Production activities will be accordingly:

| Item | Cereals Introduction | Nucleus of Production |
|--|---|--|
| Aptitude of the soil: Larger or smaller aptitude divided in 5 degrees, being degree A the best. | Areas with fertility degree above C | Area with degree A and areas with current production since it is above degree C. |
| Steepness: < 4 %; 4 to 8%; 8 to 30%; > 30% | Areas with steepness < 8% | Areas with steepness < 8% |
| current use of the earth | Agriculture, pasture and savannah | Agriculture and pasture |
| Potentiality of use of the earth | Areas of potentiality Agricultural I and II - acting more than 33% of the area of the municipal district. | Area of potentiality Agricultural I - representing 33% of the area of the municipal district |
| Distribution of the producers - area | Areas with properties above 320ha | Area with properties below 320 |

| Item | Cereals Introduction | | Nucleus of Production | |
|--|--|-------------------------|--|---|
| | . 100 to 200 proprietors | . above 200 proprietors | . Less than 200 proprietors | . 200 to 400 . Above 400 proprietors |
| Bovine flock | Below 100.000 heads 100.000 to 200.000 heads Above 200.000 heads | | | |
| Number of immigrants Immigrants number of | | | . Below 500 families. . 500 to 1,000 families Above 100 families | |
| Association of producers | | | have | |

Obs. The potential of use of the earth was defined in agreement with the combination of the factors of aptitude of the soil, steepness and use of current earth. The area of agricultural potentiality II, in spite of the earth to be less favorable and more propitiates the mechanization is used now as pasture area.

The data of each municipality classified in agreement with the indexes above mentioned are accordingly :

| Municipality | Area (km ²) | Soils Above C Aptness (1000km ²) | Soils with Aptness A (1000km ²) | Slope <8% (1000km ²) | ① | | ② | | Heads (1000 cb) | Settled Families | Associations |
|-----------------------|-------------------------|--|---|----------------------------------|----|----|---------|---------|-----------------|------------------|--------------|
| | | | | | No | No | No | No | | | |
| Araguatins | 2,297.0 | 2.2 | 1.7 | 2.1 | 44 | 38 | 524.0 | 111.0 | 105 | 1,371 | 5 |
| Cachoeirinha | 354.0 | 0.2 | 0.1 | 0.2 | 19 | 12 | 20.0 | 8.0 | 7 | - | - |
| Esperantina | 482.5 | 0.4 | 0.3 | 0.4 | 40 | 34 | 59.0 | 3.0 | 10 | 408 | 2 |
| Sao Bento do TO | 1,438.0 | 1.3 | 0.4 | 1.2 | 30 | 16 | 56.0 | 40.0 | 16 | 78 | 2 |
| Sao Sebastiao do TO | 288.5 | 0.3 | 0.1 | 0.3 | 30 | 22 | 80.0 | 12.0 | 4 | 394 | 2 |
| Augustinopolis | 395.0 | 0.4 | 0.2 | 0.4 | 64 | 30 | 115.0 | 15.0 | 36 | 401 | 4 |
| Axixa do TO | 105.0 | 0.1 | 0.0 | 0.1 | 48 | 24 | 356.0 | 19.0 | 16 | 256 | 1 |
| Buriti do TO | 272.0 | 0.3 | 0.2 | 0.3 | 58 | 53 | 73.0 | 11.0 | 19 | 120 | - |
| Carrasco Bonito | 196.0 | 0.2 | 0.1 | 0.2 | 51 | 26 | 49.0 | 9.0 | 7 | - | 2 |
| Praia Norte | 295.0 | 0.3 | 0.1 | 0.3 | 53 | 26 | 60.0 | 4.0 | 1 | 395 | 2 |
| Sampaio | 202.0 | 0.2 | 0.0 | 0.2 | 49 | 13 | 94.0 | 8.0 | 5 | 160 | - |
| Sao Miguel do TO | 408.5 | 0.4 | 0.3 | 0.4 | 44 | 30 | 93.0 | 6.0 | 8 | 76 | 1 |
| Sitio Novo do TO | 274.5 | 0.3 | 0.1 | 0.2 | 56 | 35 | 358.0 | 8.0 | 10 | 11 | 2 |
| Aguiarnopolis | 240.0 | 0.2 | 0.1 | 0.2 | 45 | 18 | 47.0 | 9.0 | 9 | - | 1 |
| Angico | 564.0 | 0.5 | 0.3 | 0.5 | 42 | 29 | 76.0 | 18.0 | 13 | 67 | 1 |
| Darcinopolis | 1,555.0 | 1.4 | 0.8 | 1.3 | 45 | 31 | 38.0 | 53.0 | 17 | 384 | 5 |
| Itaquatins | 828.0 | 0.8 | 0.5 | 0.7 | 43 | 34 | 404.0 | 62.0 | 20 | 204 | 5 |
| Luzinopolis | 281.0 | 0.3 | 0.1 | 0.3 | 38 | 15 | 62.0 | 8.0 | 9 | - | - |
| Maurilandia do TO | 792.0 | 0.2 | 0.1 | 0.2 | 11 | 10 | 40.0 | 6.0 | 9 | 53 | - |
| Nazare | 392.0 | 0.4 | 0.3 | 0.4 | 49 | 40 | 246.0 | 22.0 | 16 | - | 4 |
| Palmeiras do TO | 751.0 | 0.7 | 0.4 | 0.7 | 60 | 31 | 82.0 | 29.0 | 21 | 111 | 1 |
| Santa Terezinha do TO | 277.0 | 0.3 | 0.2 | 0.2 | 46 | 32 | 91.0 | 9.0 | 7 | - | - |
| Tocantinopolis | 1,082.0 | 0.4 | 0.1 | 0.4 | 17 | 5 | 214.0 | 68.0 | 22 | - | 1 |
| Ananas | 1,398.0 | 1.4 | 0.1 | 1.2 | 49 | 2 | 161.0 | 86.0 | 107 | - | 1 |
| Araguana | 869.0 | 0.7 | 0.0 | 0.8 | 51 | 2 | 2.0 | 26.0 | 84 | 132 | 1 |
| Piraque | 1,179.0 | 1.0 | 0.5 | 1.1 | 54 | 23 | 56.0 | 34.0 | 77 | 310 | 3 |
| Riachinho | 686.0 | 0.7 | 0.1 | 0.7 | 58 | 15 | 68.0 | 19.0 | 23 | 271 | 4 |
| Xambioa | 1,388.0 | 1.1 | 0.1 | 1.2 | 44 | 4 | 70.0 | 61.0 | 73 | 357 | 2 |
| Aragominas | 1,067.0 | 0.6 | 0.0 | 0.5 | 36 | 1 | 22.0 | 25.0 | 59 | 738 | 2 |
| Araguaina | 3,920.0 | 3.8 | 1.3 | 3.7 | 55 | 21 | 631.0 | 388.0 | 237 | 343 | 8 |
| Babaçulandia | 1,916.0 | 1.6 | 0.3 | 1.5 | 33 | 7 | 486.0 | 260.0 | 33 | - | 5 |
| Carmolandia | 354.0 | 0.3 | 0.2 | 0.3 | 61 | 39 | 5.0 | 5.0 | 33 | 76 | - |
| Filadelfia | 1,996.5 | 1.8 | 0.0 | 1.8 | 33 | 0 | 617.0 | 179.0 | 45 | 54 | 3 |
| Murilandia | 1,248.0 | 1.1 | 0.0 | 1.1 | 52 | 0 | | | 65 | 75 | 1 |
| Nova Olinda | 1,724.0 | 1.7 | 0.0 | 1.6 | 53 | 0 | 222.0 | 79.0 | 51 | 313 | 5 |
| Palmeirante | 2,472.0 | 2.5 | 0.0 | 2.4 | 51 | 0 | 246.0 | 105.0 | 22 | 205 | 1 |
| Santa Fé do Araguaia | 1,684.0 | 1.6 | 0.3 | 1.6 | 52 | 11 | 13.0 | 31.0 | 110 | 350 | 2 |
| Wanderlandia | 1,379.0 | 1.3 | 0.3 | 1.3 | 42 | 15 | 260.0 | 139.0 | 38 | 192 | 3 |
| Total | 37,050.5 | 32.7 | 9.9 | 31.9 | | | 6,096.0 | 1,975.0 | 1,446 | 7,905 | 82 |

Obs: ①% of Agricultural Potential I and II: ②% of Potential I

The suitability of each municipal district for the activity of Cereals Introduction activity or Activity of Nucleus of Production, was accomplished being considered all the previous data.

The characteristic of the cereals production area is the readiness of great area of good earth, developed for medium and big producers and the flock the size of these producers. For the production nucleus, the conditions of the soil and earth, amount of micro and small producers families. These combinations, it defines the suitability of the municipal district:

Introduction of Cereals

| Aptitude | Area of potentiality Agricultural I and II | Medium and big producer and bovine flock |
|-----------|--|--|
| 1. Low | Area above 33% of the municipal district | below 100 producers or below 100.000 heads |
| 2. Medium | | above 100 producers or above 100.000 heads |
| 3. High | | above 200 producers and 200.000 heads |

Nucleus Production

| Aptitude | Area of potential agricultural I | Association | number of micro and small producers and number of immigrants |
|-----------|--|-------------|--|
| 1. Low | Area above 33% of the area of the municipal district | have | below 210 producers or < 500 families |
| 2. Medium | | | Above 200 producers or > 500 families |
| 3. High | | | Above 400 producers and 1000 families |

Considering the figures given above, analyze of the tipificação of the municipal district becomes accordingly:

Picture 6.2.2 - Tipificação of Municipal districts

| Municipal district | Aptitude | |
|-----------------------|-------------------------|-----------------------|
| | Introduction of cereals | Nucleus of production |
| Araguaina | 3 | . |
| Babaçulândia | 2 | . |
| Ananas | 2 | . |
| Filadelfia | 2 | . |
| Palmeirante | 2 | . |
| Wanderlândia | 2 | . |
| Santa Fé do Araguaia | 2 | . |
| Augustinópolis | 1 | . |
| Axixa do TO | 1 | . |
| Buriti do TO | 1 | . |
| Carrasco Bonito | 1 | . |
| Praia Norte | 1 | . |
| Sampaio | 1 | . |
| São Miguel do TO | 1 | . |
| Aguiarnópolis | 1 | . |
| Angico | 1 | . |
| Darcinópolis | 1 | . |
| Luzinópolis | 1 | . |
| Palmeiras do TO | 1 | . |
| Santa Terezinha do TO | 1 | . |
| Araguana | 1 | . |
| Piraque | 1 | . |
| Riachinho | 1 | . |
| Xambioá | 1 | . |
| Aragominas | 1 | . |
| Carmolândia | 1 | . |
| Muricilândia | 1 | . |
| Nova Olinda | 1 | . |
| Araguatins | 2 | 3 |
| Esperantina | 1 | 2 |
| Sítio Novo do TO | 1 | 2 |
| Itaguatins | 1 | 2 |
| Nazare | 1 | 2 |

Like this the Araguaina municipal district is the first in aptitude for the proposal of Cereals

Introduction proceeded by the municipal districts of Babaçulândia and Pineapple. As the Nucleus of Production activity, the best is the municipal district of Araguatins, following by Esperantina and Sitio Novo de Tocantins.

6.3 Selection of Priority Area

The selection of the municipal districts for the study of the cereals introduction development plan and nuclei of production was taken by base the choice of 5 municipal districts pré-selected by the previous tipificação and analyzed their potentiality settling down the following criteria of final choice:

- Producers initiative for the productive activity, improvement of the economical situation and agreement with the development plan proposed;
- Municipal district that has influences for the demonstrative effect to the other municipal districts, besides having easiness in the access;
- To have effect as model for the implantation in other areas, besides making possible a high return of the accomplished investment;
- To have organized infrastructure of technical support like RURALTINS, NATURATINS, ADAPEC, etc., facilitating attendance in all the senses;
- To have commercialization infrastructure.

Considering the items above as classification requirements for total punctuation of the potentiality of this municipal district, we have:

| | Municipal district | Intention producing | Effect demonstrative | Model | Development viability | Infra structures organizational | Infrastructure commercialization | Total points | classification |
|------------------------|--------------------|---------------------|----------------------|-------|-----------------------|---------------------------------|----------------------------------|--------------|----------------|
| Introduction of Grains | Araguaína | 8 | 10 | 10 | 10 | 10 | 8 | 56 | 1 |
| | Babaçulândia | 3 | 3 | 4 | 6 | 1 | 4 | 21 | 4 |
| | Ananas | 6 | 5 | 7 | 7 | 2 | 6 | 33 | 2 |
| | Filadelphia | 3 | 6 | 4 | 6 | 1 | 5 | 25 | 3 |
| | Palmeirante | 4 | 3 | 2 | 5 | 1 | 4 | 19 | 5 |
| | Wanderlandia | 5 | 5 | 2 | 3 | 1 | 2 | 18 | 6 |
| | Santa Fé | 4 | 4 | 1 | 2 | 1 | 2 | 14 | 7 |
| Production Nucleu | Araguatins | 8 | 10 | 10 | 10 | 10 | 7 | 55 | 1 |
| | Esperantina | 5 | 6 | 6 | 7 | 3 | 5 | 32 | 2 |
| | Sitio Novo | 4 | 6 | 6 | 6 | 3 | 5 | 30 | 3 |
| | Itaguatins | 5 | 5 | 6 | 6 | 2 | 4 | 28 | 5 |
| | Nazare | 4 | 6 | 4 | 6 | 4 | 5 | 29 | 4 |

It was defined like this for the Cereals Introduction, the Araguaína municipal district and for the Nucleus of Production activity the Araguatins municipal district, as the ones that possesses highest potential.

6.4 Verification of the Results Obtained in the Priority Areas Evaluation

These two municipal districts the main production characteristics and general condition are as follows:

In Araguaína:

- Araguaína possesses already area of soybean production with rotation;
- In operation 2 processing units of milk (great and small plant);
- Expansion of the chicken integration;
- Selected as priority area for the horticulture in urban perimeter;
- Tomato processing unit installed in the Industrial District;
- Already is working a processing unit of Babaçu palm heart in the Industrial District;
- Cassava processing unit in construction in the Industrial District;
- Possibility of UNITINS Veterinary University cooperation

In Araguatins:

- Expansion of the buffalos creation;
- Distribution of swine new species through experimental units;
- Attention returned as appropriate area to banana's production;
- Expectation in the production of vegetables in the urban perimeter;
- Possibility of agricultural federal school cooperation

Therefore, it is ended that Araguaína and Araguatins can be considered appropriate as municipal districts model to the proposed plans accomplishment.

6.5 Priority Areas selection

Therefore they were selected 2 representative municipal districts that are adapted to the development of these proposed plans. In this selection, Araguaína was indicated as representative for the Agricultural Diversification and Araguatins for the Nucleus of Production. Also, Araguaína is the municipal district representative of the north area and Araguatins of the extreme north area, with a relatively developed infrastructure making these places advantageous to the execution of the plans. The two municipal districts were also elected as important to the development of each plan tends several indicators of agricultural development. Like this, Araguaína and Araguatins are the municipal districts selected for the elaboration of the Study of Viability.

6.6 Study of Viability execution

The Study of Viability, to be elaborated in the priority municipal districts, will elaborate a preliminary project adapted to the conditions of the area relief. The study will be accomplished at municipal level tends as study items the following:

- Plan of Use of the Earth;
- Plan of Improvement of the Agricultural Production;
- Introduction Agroindustry activit;
- Plan of Environmental Conservation;
- Glide of investment and financing;

(1) Use of the Earth glide

The plan of use of the earth elaborated in M/P will be confirmed through field studies, evaluating the suitability of his zoning. In this process, discussions will be accomplished with representatives of the agricultural section of each municipal district to elaborate plans of use of the earth adapted to the local reality.

(2) Improvement of the Agricultural Production glide

It will be proposed agricultural production adapted to the local reality. The evaluation of the method of agriculture diversification will be evaluated in the following aspects:

- Cultivation method and grain species, crop method and pasture species;
- Technical support method (attendance concrete model);
- Cost and grains and pasture estimated production.

They will also be best evaluated the following items in the methodology of promotion of the production nucleus:

- Forms of handling (recommended model), appropriate size and appropriate number of associates;
- Method of development of new varieties and of handling;
- Technical support method, associations formation and administration, method of commercialization and distribution of income.

They will be studied the improvement possibility for the cattle area the following items in the priority areas:

- Improvement of the bovine production and buffalos creation introduction;
- Method of swine production promotion and creation of small animals.

Here the necessary scale will be evaluated. They will be appraised the necessary resources and the increase of the productivity, mainly in the municipal districts where will be appraised the introduction of rotation of cultures.

(3) Formation of the Agricultural Products Processing Section glide

The plan of formation of the agricultural products processing section will be accomplished at medium term, based on the plan of production of each municipal district in the Study of Viability. As the future conception of each Study of Viability can vary, these will be accomplished individually.

(4) Environmental Conservation glide

They will be appraised the possibility of execution of the following items:

- Promotion of the agroforestry activity, silvipastoral and reforestation;
- Transfer to conservation areas.

(5) Financial Politics of the Government and financial loan lines glide

The financing plan will be elaborated in agreement with the viability and possibility of investment of each municipal district.