

TOWN PLANNING IN LEÓN, NICARAGUA

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Introduction.

Since 1986 friendly connections have been maintained between the city of Utrecht in The Netherlands and the second town in Nicaragua: León. The town bond Utrecht - León led to several development activities in the field of public housing and town planning. Because a western municipality has entered the path of development aid, attention is paid to the effectiveness hereof. In this article it is examined which municipal and regional elements are important for the town planning programme and which economical measures can be added to it.

Background.

Availability and control of land in the cities of Nicaragua are of great importance to the realisation of the environmental and public housing policy. The financial and economical situation is very bad and it is getting worse each day. Hardly any houses are built, so hat the public housing policy is directed towards steering independent building of houses - by the so called self help housing - in the right direction.

As a consequence, the spending possibilities are decreasing and that has negative consequences for the sale of products. These effects lead to a downward movement and a greater increase of poverty. Because of the government measures there is industrial unrest; many people are threatened with respect to their social security. The developments in Nicaragua are going at fast rate. Taking the economical decline into consideration, it is the question whether a good town planning can still be carried out without an economical development in that area; after all, the creation of physical prior conditions alone does not lead to a lasting development. León and Utrecht worked together in housing, town planning, sewerage, plantation and river improvement, were achieved:

- Considerable contributions were received from the Dutch Minister for Development Cooperation and several private sponsors so that a public housing project could be started in June 1990. This amounts to the setting up of a factory for assembly parts, the actual building of experimental houses and the start of a further building stream.
- The sewerage project has been going on for several years and this has led to the development of a sewerage plan and a maintenance plan for the sewers.
- Several years ago a fruit and shade tree nursery was laid out in León. By the end of 1988, 30,000 trees were produced already and in 1989 there were 50,000. In 1990, the F.A.O. purchased approximately 20,000 trees in order to plant them in the agricultural area for the purpose of windbreaks that must counteract erosion.

- In 1990 a start was made in the tidying up of the rain-fed river, the Rio Chiquito, which runs through the town, and was in fact an open sewer and a long-drawn-out refuse dump. A plan is underway in which measures are proposed to combat illegal dumping of waste materials, planting the banks, planning the neighbouring residential area better, connecting it to the sewerage system and improving the purification of effluent.

Within the framework of the town planning project, in 1986 and 1987 it appeared that León especially needed a Plan Regulador, that could serve as zoning plan for the whole town, as well as several Plans Director, which aimed at urban development for districts.

There was also a need for:

- * an analysis of the municipal problems and the developments.
- * A development strategy until the year 2000 and a zoning plan derived from it.
- * A determining of priorities and a phasing.

León disposes of a global zoning plan for the whole town: "Esquema Urbano de Ordenamiento Físico de la ciudad de León"(EUDOF) which was drawn up top-down by the Ministry of Housing, Regional Development and the Environment in 1986. It is a plan that does not have legal force. In practice, no policy is made with this plan; it is also too much top down. The municipality is afraid of urban proliferation; the population growth is increasing at an alarming rate and it is not possible to realize adequate building locations, and to wipe out arrears in the Infrastructure Sector (roads, sewerage, waterworks, electricity). This means that there is illegal land occupation for housing purposes. The municipality is making spasmodic efforts to get a grip on the developments, but with little success.

The situation in León.

In the second half of the eighties, the economical situation worsened badly owing to the civil war between the Sandinista government and the Contras, the economical blockade by the U.S.A. and a destructive hurricane. Because the government - partly due to emergency - tried to give the F.S.L.N organisations a place in the government, this could lead to a controlled economy, a situation which many people resist. However, the F.S.L.N. suffered a crushing defeat during the democratisation process which came about in 1990. A UNO coalition came into power with Violeta Chamorro as its president. Now the market economy is propagated and this is threatening the very poorest. The country is torn by political contrasts, which are increased by the deployment of extreme political measures. Strikes and violence are growing and in some districts the situation was explosive, especially where the former owners come back to claim their rights of ownership. The difference between rich and poor is increasing fast and is experienced as very crushing by the unprivileged.

Seen politically, the town of León takes up a special place at this moment where in most towns the UNO gained the majority in the municipal elections in the spring of 1990, the F.S.L.N. retained the majority in León. This is favourable for the international co-operation (on a local level) because no change of power has taken place; the current projects can be continued within the framework of the international cooperation in consultation with the same people with whom the agreements were made.

Some characteristics.

The urban area of León has a surface of 12 km² and lies in reasonably flat lands at approximately 100m above sea level. The possibilities for expansion of León are limited, which is caused in the first place by two rain-fed rivers that -running parallel to each other- clasp the municipal area. Further urbanisation towards north or towards south means that bridges will have to be built to surmount the obstacles, the Rio Chiquito and the Rio Pochote. North and east of the town, the quality of the agricultural land is high (cotton), so that expansion of the town in those directions is considered undesirable.

León is the government centre of region II, which includes the departments of León and Chinandega. The amount of inhabitants of region II was approximately 554,000 in 1984. About 130,000 people live in León. León is an important centre and serves several functions in a large region. There is a regional hospital, and there educational establishments, including a university. In addition, it is a regional centre for trade (markets) and services. León holds a great attraction for people from the region. The population development increases at a fast rate. In 1950 there were only 30,000 inhabitants. In the year 2001 a population of 205,000 is expected, mostly as an effect of natural growth+ the migration of the rural population to this town is anticipated to contribute to the population growth in León. Because of adverse local economic conditions no social housing projects are planned. Moreover. Construction activity of the private sector is quite limited.

There is no development of employment+ no land is granted for new companies. The nature of the industry in León is strongly determined by the agricultural products from the region. In this way, there is sugarcane processing and cardboard, fertiliser and pesticides are produced for the agriculture. Of the employed population of León 9% works in the agriculture, 18% in the industry and 73% in the service section (the total amount of jobs was 30,000 in 1985). The growth of the officially registered amount of jobs does not keep abreast of the enormous growth of the working population.

The informal sector, amongst which are street trading, service in households, self provision in the vital necessities and cottage industry, will continue their growth.

The urban structure of León shows a grid system that is derived from the Spanish colonial points of departure. The blocks of buildings, based on the "manzana" (approximately 100 x 70m), consist of deep lots. The architecture is closed and executed in one layer, bordering the narrow streets. At night, life takes place from the buildings directed towards the street. During the day, most house fronts give a closed impression. A small industry, a trade, a workshop or restaurant is established in practically every house, which enlivens the streets. In the centre of the town the walls are closed, while towards the edges the buildings are more open, where the agriculture gains the upper hand. At the edge of the town people often keep some cows, a horse and poultry. In addition, one often sees fruit trees (bananas, citrus fruit, mango trees) for private use and trade. The central functions of León lie in the "Casco histórico". The municipality wants to retain the architectonic quality of this area with help from the Spaniards and build further on the fallow land. The municipality is afraid for the return of the former owners, of whom it is expected that they will invest in the central part of the city in new hotels, offices, restaurants and suchlike. It is important to be ahead of such a development and to have a plan ready with which matters can be regulated. León is reasonably liveable with its provincial character and its still limited size. However, the increasing town urban layout, the growth of the population and a great amount of environmental problems show a bleak future. The recreational facilities at the edge of the

town are getting into a tight corner because of the demand for land. León is still a town where the facilities are within reach due to the growth, an extended area will develop, in which many people may have their own plot of land, but in which the average distance to the facilities will increase nevermore.

Arrears.

Seen from a functional aspect, there are the following bottlenecks:

- There is a decentralized development as a consequence of the destruction of the civil war (fallow land and war ruins) in the centre of the town.
- The central bus terminal is not situated near the station; both destinations are located away from the centre of the town.
- Erosion and shifting sand of the agrarian areas around the town; pollution of these areas caused by the use of pesticides.
- Pollution of the air by dust storms and exhaust fumes of lorries and buses.
- Serious pollution of the river basin of the Rio Chiquito caused by illegal waste disposal and the dumping of waste products, from tanneries, among other things.
- The presence of an airstrip for agricultural planes bordering on residential areas.
- The lack of a sewerage system in most parts of the town.
- The lack of waterworks and electricity in a large part of the new residential areas.

In 1985, in the EUDOF planning instrument, planners departed from the idea of executive programmes per sector for the next 15 years, worked out in detail in three five-year plans. Because the financing of the infrastructure and the technical facilities were not ensured, much of the necessary execution never took place. The EUDOF has lost much of its value because reality turned out to be different than was anticipated in the planning. The realisation of the facilities in the area of education and health also went on in León in the second half of the eighties, although this did not lead to centralisation in the district centres, which was the original intent. Concerning this, the municipality has not had enough grip (in their view) on location decisions.

Housing production.

The municipality records indicate that there were 23,000 dwellings in León in 1989. Yet, other sources claim that there were fewer dwellings. The average occupation of each house is 6-8 residents. The municipality estimates that 50% of the houses are in an excellent state of repair, 35% is moderate to bad and 15% is very bad. The houses in the historical town centre amount to 5,000. The municipality is looking for possibilities to stimulate individual housing improvement by establishing a bank for materials. In 1989, 55 new private houses were built. Production of houses by the government has been out of the question for years now. The municipal policy can only take care of the granting of lots for the public housing.

In the year 1991, major housing activities were to allot 1750 plots of land to the individuals to build houses and to offer 1500 rental housing into the market.

In 1989, the municipality granted 1200 lots of 8 x 20m for the building of private dwellings to future residents. The lots are made available free of costs to people who have started a family and who do not have a house of their own yet. The municipality considers the private building of houses to be an acceptable form of "public" housing in order to lessen the

shortage at least a bit. In the realisation of the new residential areas no facilities (roads, waterworks, sewage systems) are constructed due the lack of funds. However, the plans are drawn up in such a manner, that it will be possible to add these facilities later on. There is the danger that León will be completely encompassed by slums within 10 years, owing to fast growth and a permanently bad economical situation. The total amount of applicants for a rented house or a building lot is 6000. The average production have to be 1000 units per year in order to beat the immediate housing gap. Yet, in the near future, this number should increase.

In the current situation this production cannot be realised; the economy is too bad for this and there is no effective land policy. The available fallow land in the built-up area is as good as granted or occupied. Furthermore, the regional housing culture does not make stacked forms of housing popular. The Fundeci district contains apartment buildings but the turnover is high at this location. Higher concentrations and urban housing forms are not a solution, even if they could be realised. The private lot with the private home, even though primitive, is by far the most popular. This way of building demands much space and will lead to an expanded town. The nearness to the work and the trade location is increasingly threatened.

Priorities.

Taking the economical halt and the development of the population into consideration, priority as given to the creation of sufficient possibilities for the private building of houses. The provisional programme includes - in the proposed sequence of priority - the parts:

- 1 *Strategic research into the different building locations.*
The municipality of León wants to grant this research the highest priority. It must give the municipality a policy to obtain land and to distribute it. In the near future the lack of lots will become so great, that illegal occupation (something which the municipality has been able to limit up till now) can be expected. Social conflicts will be the consequence. Seeing the enormous demand and the strong population growth, it is necessary to develop a land policy on the level of the urban region. It is requested that this research starts soon and to see this in connection with the forming of the urban development plans on a district level.
- 2 *Assessment and actualising of the regional urban an regional plan (EUDOF).*
The existing regional plan of León dates from 1986 and will have to be substituted within several years. Its character is too static, too systematic, not very flexible and not implemented in the official viewpoint.

After completion of the research report (1991 by the author) there was an intensive consultation with the municipality of Utrecht to make the town planning project more concrete. In connection with the recently worsened economical situation, the question was posed whether the programme for town planning could be extended with an economical chapter, in which the economical profile of the León region is described, a strength-weakness analysis is given and limiting conditions for the economical stimulant are determined.

Local economy.

The question here is, whether it is possible to develop a strategy for the stimulation of the declining economy. In the current situation it is not realistic to take a large-scale approach as point of departure. It is necessary to consider, taking into account the existing developments, whether initiatives of which the seeds might (possibly) already be present can be stimulated and to create conditions for these initiatives to grow. It might be possible to affiliate with persons or corporations that have shown initiative, for instance, those who have participated in a building project, the fruit tree breeders and the bicycle repairers.

Several conditions can be created by way of urban and regional planning strategies: two of them are as follows:

In the existing town

- See to it that there is differentiation in the business of the streets so that there are busy streets with industrial functions and less busy ones mostly for residential use; making of hierarchical transportation routes and walking paths.
- Increasing spatial possibilities for central markets and promoting trade; handicrafts and services in the streets towards the markets.
- Reserving a limited area where economical activities (offices, hotels) are possible and the development of building regulations for this area.

In new residential areas

- In addition to the lots that will be granted for private building also offer space for initiatives of the micro and medium-sized business.
- Development of environmental regulations and environmental zoning.
- Retain short distances between living and working locations, keep supply routes of raw materials and products as short as possible.

Environmental protection.

Within the framework of EUDOF and the research report, attention had been demanded for environmental objectives, such as:

- The wish to realize a mono-functional industrial area southeast of the town where businesses can be moved to.
- The making of wind breaks of trees and parks around the town to create distance from the cotton fields and to purify the air.
- The necessity of moving the airstrip.
- The necessity of moving the patrol and diesel oil storage from the urban areas.

These objectives were not realised in the first five-year plan; new industry is not being established here, removal of polluting industries is out of the question; the government is lacking in money. Even in the future it might not be possible to move polluting industries from the residential areas. Because of this, purification of effluent at the source will have to be considered much sooner. The urban development does not solve these problems; more attention and help are needed to attain cleaner production methods. Moving the airstrip is not possible without outside help; for this reason further building of houses around the airstrip must be discouraged. However, this strongly limits the municipality in the granting of lots for the private building of houses. It is possible to profit in the traffic and transport sectors if the residents become dependent on motorised transport as little as possible. In this respect shorter distances between living and working locations are necessary. Attention can be demanded for short walking and cycling routes and the quality of the route

(think of social safety). In connection with this the pursuit of more extensive bicycle industry and more bicycle repair shops can be continued.

Conclusions

The specific research programmes will be drawn up per sector, so that people can dispose of the most important data on the basis of which policy can be made. In the long run, one of these sectors can be taken in hand each year, so that people do not have to concentrate on everything at once and so that each sector gets attention once in a period of 4 - 5 years anyway. The long-term spatial requirements lead to the necessity of a "long-term development definition". The region of León will also be involved in this.

Now that the programme for town planning has been formed further, it needs to be decided who has which task. The Spatial Planning Department of León is small (about 10 people work on spatial planning, public housing, the making of maps, management, land matters, etc) and they are too few to handle all urban and regional problems all at once. Consequently, priorities must be established (as has happened) and the programme must lead to an enhancement of the level of knowledge, self-activation and the prevention of much dependence. Those who are involved shall have to transfer their knowledge to each other during the co-operation. Concerning this, it is advisable to enter into a co-operation agreement, in which mode of operation, progress of the process and mutual roles and responsibilities are laid down. Co-operation between two cities can become effective when the town bond lasts for a minimum period of five years and a fully integrated product can be presented. Co-operation in the area of urban planning will carry out most effect when clearness can be achieved concerning the priorities in local physical policy.

References:

- 1 "Esquema Urbano de Ordenamiento Físico de la ciudad de León", Ministry for Housing, Regional Development and Environment, Managua, Nicaragua, 1986)
- 2 "Hacia un programa de planificación urbana Municipio de León", Jan Bredenoord/ Municipality of Utrecht, The Netherlands, 1990)