

FROM SPONTANEOUS SETTLEMENT TO INTEGRATED PLANNING
AND DEVELOPMENT

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Abstract

The reclamation of new land, which is uninhabited, involves internal colonization implying the establishment of a new society. In the beginning the reclamation projects were carried out by private corporations and there was no clear settlement policy. Even when in the 19th century the State took responsibility for the operations no settlement policy of any importance was developed. During the execution of the IJsselmeerpolders-project in this century a planning and development system was built up, however, that takes care of detailed integrated plans, takes responsibility for the preparation of the land, for settlement patterns, for construction, for the guiding of immigration, the creation of jobs, and the harmonious integration of the plan in the national planning goals.

The origin of polders is to be found in the human attempts to protect land against flooding, with the aim to make land that could be used temporarily only, into land that could be occupied permanently and safely. In the Netherlands these attempts started about one millennium ago.

Why these heroic efforts with primitive tools in such a dangerous half-drowned country were made is an interesting question, but will not be

answered here. Not the causes but the effects are relevant in this context. Out of this co-ordinated moving of earth which enabled the people to control the moving of water, technical as well as organizational skills were developed, which created a self-consciousness in matters of water control that formed the necessary basis for the development of plans for drainage of new land, land that was not occupied before. In small-scale reclamations this did not always imply new human settlement: the reclaimed land was just used to enlarge the existing farms or estates. In the North of the country it is usual, up to the present, that the borderlines of a farm, standing perpendicularly on the coastline, are elongated into the water and all the land that will eventually be reclaimed, lying between those lines, belongs in principle to that farm. Even if a concerted effort was necessary, such as the drainage of a lake, for which windmills had to be built for pumping the water out, it might well be that the reclaimed land was farmed by the people living on the border of the former lake.

When the drainage projects became larger and technically more sophisticated, considerable investments were necessary, which could not come from local sources. As a consequence the projects came into the hands of managers, planners, and were considered as ends in itself. Farms were established, villages came into existence, people from elsewhere were moved in, sometimes from adjoining areas, sometimes from larger distance, sometimes individually, sometimes in groups.

Although the inhabitants of the new land did not come from very far, most often from within the Netherlands, which is a rather small country, a fact is that these people came together in new circumstances, where everything had to be built up from scratch, where a new society had to be formed. As such, the name 'internal colonization' which has been given to such processes is quite adequate. Also the name 'pioneer' attributed to the first settlers was not an exaggeration, because the life of the first and sometimes even the second generation was not an easy one. In the 17th century the companies which undertook the works were formed by merchants, urban people, who wanted land but who did not know how to work it and sometimes appointed unskilled people to continue the exploitation of the land after drainage. Furthermore the land was often badly drained, as a consequence bad harvests came about.

People were struck by diseases, like malaria, in unhealthy conditions at the beginning.

In the 19th century, when some large drainage schemes, with modern techniques (steam engines instead of windmills) were carried out by the State and not by private companies, the living-conditions for the people were not at all good in the beginning. The State carried out the works for reasons of safety-protection of the areas surrounding the lakes - and was not interested in the exploitation of the land. After initial drainage and a rough parcelization the acquired land was sold as soon as was possible and no attention was given to what happened further. This was the case with one of the largest developments in this country, the Haarlemmermeer, an area of 20.000 ha, in which now Schiphol-airport is located. Prosperous as the region is now, very poor it has been in the first twenty years of its existence, because of bad drainage, lack of good organization of the building of the new society, resulting in bad health-care, formal education, housing and transportation.

When in this century the Dutch government decided to carry out the largest reclamation project ever undertaken, it was understood, on basis of the aforementioned experiences, that as the goal should be to develop not only new land, but also a prosperous and harmonious society, it should take full responsibility for the development process as a whole, not only for the technical, but also for the social and economic aspects. This idea of more intensive intervention by the State was not only inspired by the idea that the mistakes of the previous century should be avoided now, but was also an expression of the coming of the welfare-state.

The State had to play in this way a dual role. As owner of the new land, developed with public funds, it had the duty to strive after good economic management of the area. It should, just as any private entrepreneur try to make profit. As guardian of the welfare-state it had to protect the inhabitants against misfortune and to promote public welfare. These two roles are not always easy to combine.

The first role was in the beginning considered as the most important one. The land was made ready for normal cultivation by the Development Authority. A land allocation plan was made, with fixed sizes and types

of farms. The land remained property of the State, the farm buildings were constructed by the State. The farmers were carefully selected in order to be sure that a very capable group of people would till the land in the new area. If the main aim of a reclamation project is to increase the agricultural production, then this is a good policy. It is the same policy as would be applied by a private landowner: try to find the best tenants. This policy made it unnecessary to make extensive educational and training programmes for the settlers. They were ready for the job. This is stated so explicitly because in many foreign cases the main problem is how to teach people to make the best use of the new opportunities. In those cases the people are not selected: they are the ones who are entitled for some reason to receive a piece of land.

The second role, being the guardian of welfare, is less easy to describe. Even on the matter of the farms itself, the basis of the economy, there were next to economical also socio-political factors that played a role in decision-making. From a purely economical viewpoint it would have been possible to calculate which type of farm would give the highest profit. But this would not give necessarily the highest socio-economic advantage on the national level. For that reason a rather complicated system was developed, resulting in a mix of smaller and larger farms, giving opportunities to different kinds of farmers.

But outside the direct sector of farming the planning became also more 'human', more directed to the building of a society than to the economic development only. The farming population should not only have good farms, but there should be also service-centres, good housing for the workers, there should be shops, schools, churches, medical services, recreation facilities, libraries. And all the personnel employed in these services should have a good basis for existence and the services should have a good quality.

In retrospect this sounds logical and simple. At the time of the first development in the IJsselmeerpoldersproject, half a century ago now, it meant that all kinds of relations between social facts had to be studied and quantified: how many customers does a baker need to make a living; how often does an average person borrow a book and how many kilometers he will travel to get such a book; young lovers need some wood to make walks in: how many hectares of wood should be planted to

satisfy the needs of a certain quantity of lovers?

This did not only provoke research needs, but it also encouraged, even necessitated, government-interference in a number of fields that had always belonged to the private sphere. Standards and norms had to be found for a number of immeasurable things.

Of course research and normsetting had imperfections, not in the last place because social change remained for a large part unpredictable, but an advantage of all this research-work and striving after integrated, comprehensive planning was, that the understanding about interdependencies in matters of societal development was improved and that because of that better planning systems could be designed.

From the single goal, how to keep the area dry and safe, the goal to make profit from agriculture, now the goal was to give people a good life.

As agricultural areas the polders could be considered as being an end in itself. Of course the internal colonization had also as a goal to solve problems on the main land: farmers leaving for the polders freed space for other forms of landuse, or for improving the farm-structure in overcrowded areas. The policy of selection of applicants for a farm in the polders was in later years even geared to that purpose. But the developments within the project were nevertheless happenings in a more or less closed regional-economic system.

Because in other parts of the world, in many or most cases, polders are developed for agricultural purposes, some more attention will be given to that part of the history of the IJsselmeerpolders.

If agriculture is the main source of production, the changes in agriculture have far-reaching influences on the socio-spatial system. In our case the main change was that the response of agriculture to the cost-price squeeze was the replacement of labour by machines, which meant that there were less people on the land. Less people on the land means a lower demand for services.

This lower demand for services was quite problematic, because it was only quantitatively lower, qualitatively it became higher. Good schools were wanted, shops with a variety of wares were requested. This problem could within the closed system only be solved by reducing the number

of central places and accepting the larger distances from the periphery of the catchment areas to the core. Because of the fact that the farmers were in the position that they could possess one or more private cars the increase in distance was acceptable, but of course not ideal. The remarkable thing about the project of the IJsselmeerpolders is that it is possible to see the effects of socio-economic change and of development in planning, real life, because the polders have been constructed one after one, with time-lags long enough to see change clearly: years of drainage being 1930, 1942, 1957 and 1968. In the first polder the main effort has been put into a good landuseplan for agriculture: rectangular lots, good roadconnections, in some parts even waterconnections. But a plan for a balanced settlement pattern was not made. It was expected that like in the past at roadcrossings services would spring up. Of course this would have happened, but not in the orderly way and without personal dramas as was the norm in this era. Therefore, later the government took care of the establishment of villages. In the second polder the lesson was taken at heart: next to the careful planning of the agricultural landuse, the settlement pattern was designed on basis of extensive studies on catchment areas of different kinds of functions and on distances from the periphery of a village area to the centre which would be acceptable. The result was a hierarchical pattern of a regional centre in the geographical point of gravity and a circle of ten villages around it. Already during the period of execution of the plan it became clear that the dynamism of societal development was underestimated and that the system was too static: the villages remained too small, the services could not function in the proper way for that reason, and because of an immense increase in private motorization distances counted much less as a limiting factor, which caused that the regional centre grew faster than was expected. A parallel of this way of planning in a closed system can be found in the Lakhish region in Israel (not a polder but a former desert). The same hierarchical pattern set up in about the same time and now a prospering regional centre - Kyriat Gat - has grown while the villages have hardly a function.

In the third polder the results of the changes are clearly demonstrated. Again a regional centre was planned. The number of villages was, in comparison with the former polder, greatly reduced, four instead of

ten and of these four only two would be built. The average size of the farms was increased, the number of people employed in agriculture went down and down and soon it was realized that the system of enlargement of scale could not go on forever. The closed system was broken up by the decision not to build houses for local demand only in the two villages that were realized, but just to build and allow people from elsewhere, who were not economically tied to the area, to buy or rent a house. Because of a shortage of houses and the desire of many people to live outside the big cities in a quiet rural environment, this policy was quite successful.

It would be interesting to know how this process would have developed in the following polders if agricultural use would have been remained the main function.

But this was not so. Around the year 1960 the period of the IJsselmeerpoldersproject as an isolated agricultural project ended. The polders coming nearer to the urban concentrations in the West of the country (the Randstad or Rim City) were more and more regarded as a compensation for the scarcity of space in the urban areas. The borderlakes, designed at first for geohydrological reasons only, became in a short time recreation-areas of national importance, for swimming, for sailing, developing a demand behind the dykes for areas where campings and holiday-bungalows could be built.

Of much more importance has been the decision to choose the polders as the location of two new towns. The first one, Lelystad, could be regarded as an expanded town because the polders would have needed a larger centre, a kind of provincial capital, anyway. Without the 'task' to grow out to 100.000 inhabitants, some 30.000 would have lived in the place if the regional system had remained closed.

The second one, Almere, designed for 250.000 people, is a pure satellite of Amsterdam, but is playing role of course in the polders.

In a rather short period changes have taken place which have a tremendous effect. Where as a continuation of a thousand years old tradition the agricultural space of the Netherlands would be increased with about 10 percent, now the region is seen as the habitat for half a million of people.

In the Dutch terms half a million of people is a sufficient number for

forming a new province, but this is probably not of great interest for a foreign audience.

Of more importance may be that the agricultural function, which has been the most important during the period of reclamation, is now being attacked by a third new element: nature. In this crowded, urbanized and industrialized country there is a general fear that natural areas, typical for the lowlands, will disappear. Therefore, there is a strong (political) movement that wants to keep parts of the drained land as it is after reclamation and does not want that the fifth and last polder is made, because as a lake this part of the territory has more value than as land.

Some people state that not doing things, not transforming the environment is the ultimate wisdom after a period of ruthless destruction in order to make profit. Others think that this attitude is the result of a state of such high prosperity, that people think they can afford to leave things as they are. Probably there is some truth in both statements. Anyway, it is a curious phenomenon to see that there is such a resistance to the attempt to create new space for human life so near to an area where six million people live and who have a shortage of space. Of course the water as such is also space for human use and this is recognized by the fact that the border lakes of the polders are designed wider than is necessary for hydrological purposes.

So, as has been said: each polder is an expression of the time in which it has been constructed, even the last one by not being constructed yet! It shows that the main value of this technique of draining is the acquisition of space, which can be used for many purposes. This is demonstrated in the Netherlands very clearly, because this is such a densely populated country. Also the older polders, which have originally been made for the acquisition of agricultural land, are often used now for other purposes: industry, residential quarters of the town, or airports. The fact that these polders are so clearly a product of their time is probably typical for polders as such, because polders are flat, are rather undifferentiated, have hardly any historical landmarks, and give therefore the planners a high degree of freedom for designing. This is in itself fascinating, but it gives also a heavy responsibility and the absence of guidelines present in the existing environment, causes decision-

making to be often laborious.

On the other hand the freedom of the planners is limited by the wishes and needs of the immigrants. If improvements of a certain kind are wanted, then they can be realized - within reason - in the new polders, but if the immigrants want to maintain or reproduce their culture in the new environment, then there will be no fundamental innovation. Although there is much societal change, this change attracts so much attention and is described at such length, that there is hardly any awareness of continuity. If one studies the so-called new society on the new land than it is surprising to see how much continuity there is. For a part this will be because a number of cultural elements function so well that there is no need for change; for another part it may be explained by tradition (which can be rational as well). Remarkable is the continuity in the system of agriculture. There is an enormous change in techniques, the production and the productivity have grown, but the types of farms, even the size and form of the farms show a resemblance which is striking, whether one looks in the sixteenth century Beemster, the eighteenth century Haarlemmermeer or the present days IJsselmeerpolders.

This internal logic of the design and development of the first polders disappeared with the coming of the new towns. The number of inhabitants was no longer the result of the productivity of the land, but became a target in itself and the result of decisions and developments outside the region. This made the planning process more complicated and more a part of the national planning.

The task of the developer was no longer only to equip a region with the necessary system of services and amenities, but also to promote and create the resources for making a living as well: by replacement of activities and jobs from elsewhere (overspill from the cities) or establishment of new activities. Although this building of new towns was started by the same organization that developed the polders as a whole, this activity is in fact no longer typical for polders, except that the start had to be made from scratch: no infrastructure of any kind available in the beginning. Because these new towns with their fast growth involve a large building activity, new ways of financing had to be found, the funds coming from different and mostly private sources. This meant that more people and institutions were going to

participate in the decision-making process. This made matters more complex and the timing in the system of networkplanning more vulnerable. As building of highways, construction of a railway, the budget for housing etc. are all subject to different spheres of decision-making and have their own sequences of priorities, regional comprehensive planning becomes difficult.

Looking at this complex situation it becomes all the more clear what the advantages are of the formula of the IJsselmeerpoldersproject: ownership of the land, planning, development and management in the initial stage in one hand.

Of course a good organization is not a guarantee for success in all respects. The general economic situation in a country, the political climate, the changes in value-orientation, have quite an influence, especially on long-term planning and a development-organization has to take these factors as data. This can be seen in the present: it is possible to build a new town, to develop a new society on new land, but if unemployment is growing in the country and in neighbouring countries also, it cannot be avoided that this phenomenon occurs also in the new towns. But the interesting fact remains that polders as such, by providing space, have always a value. That is true for the oldpolders, it will also be true for the new. It is quite possible that there will be no need for more new towns in the future. Then it is good to realize that we did not make polders in order to have space for new towns, but that we found a place for new towns because there were new polders. It is quite probable that in the last polder to be made, agriculture will form the main activity. In that case we can under again new circumstances, with new techniques perhaps, but with old experience, continue this work that started over 1000 years ago.