The Agenda 21 and the allotment garden movement by Dr. sc. Achim Friedrich

Introduction

The Conference for Environment and Development of the United Nations (UNCED) in Rio de Janeiro has approved the Agenda 21 in 1992. The Agenda 21 was accepted by more than 170 countries and includes an action program for the 21st century. In a total of 40 chapters with 285 DIN-A4 pages in total, all essential political domains in the interest of an environmental friendly long-term development are dealt with.

The aim of the Agenda 21 is to act against a further deterioration of the environment by setting specific and detailed objectives to be achieved in order to gradually improve and continuously insure the use of natural resources. The integration of environmental aspects in all political fields is one of the main objectives of which the implementation is required from industrialized as well as from developing countries alike.

Requirements to fight against poverty, population politics, trade and environmental considerations, policies as to waste disposal, chemical substances, climatic conditions, energy and agriculture are forming the content of the Agenda 21 for the member states of the UNO (United Nations Organization). Furthermore, problems of financial and technologic cooperation in industrialized and developing countries are analysed as well. This allows encompassing the close ties between environment, ecology and economy.

It is decisive in order to achieve the objectives set within the implementation of the Agenda 21, that all countries establish and settle accounts regarding national action plans to put into practice the UNCED results. This should be done on the assumption that the Agenda 21 is a dynamic program, which, in the course of the time, will evolve in accordance with needs and circumstances.

In the introductory remarks it is acknowledged among others that humanity is at a decisive point of its evolution. "We experience an increasing inequality between populations and also inside populations, a growing poverty, more famine, sickness and analphabetism as well as a continuous damaging of ecological systems of which our well-being is depending". The solution of the related problems requires a global partnership aiming at a long-term development.

The implementation of the problematic linked to the Agenda 21 is first and foremost the task of governments but a maximum involvement of the public and an efficient support from non governmental organizations and other groups should be organized in order to be able to deal with the extend of the challenges to be taken up. It proved efficient to set up "local agendas" in order to deal with specific priorities "on site" and to find adequate solutions. Federations, associations and organizations, which are active in the territory of the communes, are requested to participate in the establishing of these "local agendas".

In this sense, the Agenda 21 delegates to the allotment gardeners organized in national federations the responsibility and obligations to take over their part in achieving the defined objectives. Priority in this context is given to show and achieve possible solutions, which take into account local situations.

It can never be the aim to set up a generally applicable program for all allotment garden associations. It is the goal of this contribution to define the fields of intervention, which can be of orientation for the allotment gardeners "on site" in order to participate with their activities in the "local agendas".

Meaning and current situation

Two questions arise in this context.

First: Does the allotment garden movement in accordance with the terms of the Agenda 21 make sense?

A rough calculation can be convincing. In the German allotment garden federation f. ex. about one million allotment gardens are registered. With an average surface of 400 m2 per garden the overall surface amounts to about 40.000 hectares. Every single allotment gardener is responsible for life on this surface and in the soil of this garden.

This surfaces receives every year about 240 million m3 of precipitations (600 mm per year) and with a nitrate quantity used of 10 g/m2, about 4,000 tons of plain nitrate (14.800 nitrate of ammonium and calcium) are spread out over this surface. There are still allotment gardeners who ignore the possible consequences of inappropriate actions.

Second: What's the reason behind the Agenda 21? It's about 10 years old now! We have taken the direction indicated therein a long time ago already!

That's right, but it should be highlighted that the Agenda 21, for the first time, grouped the problems on a global level, which problems came up necessarily earlier in industrialized countries, thus could be acknowledged earlier and finally lead to a corresponding legislation. It is not appropriate to be overbearing regarding this point.

And in spite existing laws there's still much to be done even in our country. Everyone knows the problems. Laws are good but they are best if accepted and complied with by every single person. Participating in the establishing of "local agendas" therefore offers an excellent opportunity to achieve this.

Priorities for the movement of allotment gardens

The movement of allotment gardens is linked, by its social and specific aspects, to many chapters of the Agenda 21. This is illustrating the complexity of the relationships.

Within the frame of this contribution reference should be made to chapter 7 "Promotion of a sustainable development in housing areas" as well as to chapter 14 " Promotion of a sustainable development in agriculture and rural areas". Chapter 7 states: "The first goal of urbanistic planning policy is the improvement for social and economic conditions and the quality of the environment in urban and rural housing areas as well as in the working and living environment of all human beings (...)".

In relation with the study "Importance of the allotment garden movement in urbanistic planning, in ecological and social issues" and with the federal competition "Gärten im Städtebau" (gardens in urbanistic planning) in Germany much, if not everything however, has been said about the importance of allotment gardens now and in future. For this reason it should simply be reminded here that allotment gardeners have, regarding this problematic, and by their active participation in the use of surfaces and urbanistic planning, enough opportunities to be involved and to defend their interests in order to anchor their visions and expectations for the movement of allotment gardens in the overall territorial concept of their commune.

Legislation and Agenda 21: the example of Germany

With the renewal of the Bundeskleingartengesetz (BkleingG) in the year 1994, the issues of protecting the environment and nature where included as new elements in the 3rd paragraph as well as the issues relating to maintaining landscapes, which should be complied with by allotment gardeners when using and cultivating their gardens. The legislator thus has, in accordance with allotment gardeners, taken into account a point of the Agenda 21 as well as a provision of the Bundesnaturschutz-gesetz (BNatSchG 1976). The latter states as an aim the long-term protection, maintenance, development and performance of the natural environment and the ability to use natural resources in the broadest sense of the term.

The implementation of the objectives, which can be derived from this for the movement of allotment gardens, requires extensive knowledge and availability for their application. Ecological, environmentally friendly and biological gardening does not mean "back to nature" but rather, on the contrary, it means using the most recent scientific findings in an appropriate manner. Advisory functions therefore become increasingly important.

This is even more the case as the individual allotment gardener, who - and this even more so for the younger generation – hardly has any agricultural knowledge and thus has previously to acquire such knowledge. Exchanging such knowledge and ideas within the association and providing mutual support thus become an interesting field of activity.

A series of specific incentives for the possibilities of ecologically oriented gardening in the allotment garden was already set up in the outcome of an environment seminar of the BDG in June 1998. Following to this, further relations and aspects should be dealt with as well as additional incentives provided as to the practical work for all European allotment gardeners.

Protection of soil

Chapter 14 of the Agenda 21 deals with the promotion of a long-term agricultural and rural development based on the acknowledgment that in the year 2025 the world population will reach a total of 8.5 billion people (with 6 billion in 1999). Satisfying the corresponding requirements as to food and other agricultural products is a major challenge for agriculture.

Only a long-term oriented and locally appropriate agriculture can succeed in doing so. In this context, maintaining the fertility of the soil and an improved use of production means are essential factors. Under the aspect of soil usage it is justified to derive the objectives relating to the movement of allotment gardens from chapter 14.

The law applicable in Germany since 17 March 1998 regarding soil protection (BbodSchG) is entirely in the sense of Agenda 21 and states in its 1st paragraph: "It is the object of the present law, to warranty the long-term functions of the soil or to reestablish such functions (...)". The law provides that, everyone who is interfering with the soil should act in such a manner as to avoid damaging soil modification (§ 4 (1). Furthermore, it is required to prevent such damaging modifications. (§ 7).

It is good practice to warranty the fertility of the soil on a long-term basis as well as the performance of the soil as a natural resource (§ 17 (2)). This is obtained by:

- respecting the site and climatic conditions for soil treatments,
- maintaining and improving the soil structure,
- · planning cultures in order to favour biologic activity,
- insuring humus level as appropriate for the site.

Appropriate use of manure

The regulation regarding the principles of good practice in the use of manure (regulation regarding the use of manure of 26 January 1996) is based on the law on manure already enacted in Germany in 1977. It relates to the use of manure on agricultural and garden areas.

Even if private gardens and thus also allotment gardens are excluded from the application field of this law, the principle stated therein should be complied with also in the field of allotment gardens. This seems even more important as the XXXI International Congress of allotment gardeners in Brussels (1998) specifically dealt with the questions of mineral manure. On the basis of a general very high use of manure and nutritive substances for plants in allotment gardens, mineral manure was classified among environmental poisons if used inappropriately.

What is the point here? The principles for the use of manure include the temporary and quantitative limited use of manure so as to optimise the use of nutritive substances by the plants and thus avoid spilling of such substances into water. Nitrate containing manure should be used so as to make the amount nitrate contained therein correspond to the effective need of the plants.

This however requires to know the actual need in nutritive substances of every single plant, to observe the growth cycles of species and to know which substances are already present in the soil, in particular nitrate. This again requires a soil analysis to be carried out. Nitrate containing manure may only be used if the soil can absorb it. If the soil is drenched, frozen or covered with snow, this type of manure may not be used. Nitrate levels of manure such as compost, animal manure, and green manure harvest residual should also be included in the overall balance.

Protection of plants – if possible without chemical substances

The Agenda 21 also requires an integrated plant protection. The law for the protection of culture plants of 15 September 1986 (PfISchG) (Germany) has already responded to this need by highlighting the combination of biologic, biotechnical, plant growing as well as cultural and technical measures as being preferable for a long-term form of plant protection by restricting the use of plant protection substances to the strict necessity. The new law on plant protection of 1 July 1998 further restricts the use of such substances and delegates competence to the Länder to enforce specific provisions.

For the individual allotment gardener this means, that before buying such substances, precise advice should be taken (by the technical advisors of the association / sales personnel). The ideal solution however is to organize gardening practices and the biologic balance in a way that makes the use of chemical substances not necessary.

Attention should also be drawn to another factor relating to the existence and use of chemical plant protection substances: A safe handling of such substances also includes their disposal in respect with the environment, the compliance with deadlines for use and disposal for which the new law enacts very strict provisions.

End

Practical aspects

The question could be, how can allotment gardeners, on the basis of the objectives of

the Agenda 21, comply with these provisions in a tangible way? Many elements have already been dealt with by expert advice. The associations of the various levels make important efforts to have all allotment gardeners comply with the ideas and knowledge of an ecological oriented gardening and use of the allotment garden. Yet, this point is also the weak point. The implementation of the available knowledge does not reach, for various reasons, the extend desired.

It is however possible to understand the allotment gardener who does not fully comply with these requirements without doing this on purpose. The question should be if to certain extends some individuals are not just overburdened by this – for various reasons though – and if, in the framework of putting into practice the Agenda 21, new approaches could not be necessary.

Some aspects in this regard

· It is generally accepted that compost has its place in the garden. But does the process of composting correspond to optimal conditions? The materials from the

annual work in the garden may not allow to reach the temperature curb necessary in a compost as such material is not available continuously and in the right quantities. The consequence thereof: the compost is not of best quality, especially with regard to phytosanitary aspects. A thermocomposter can avoid this but is very expensive. A compost production on the level of the association could be preferable.

• Shredded material is considered optimal for compost production and as mulch. Performing shredders are available in many different forms but are expensive and, above all, are too expensive for every single allotment gardener. In this case also, the association shredder could help.

- Soil analyses? Most allotment gardeners are favourable to proceed to such analyses but laboratory analyses are expensive and, next, the values obtained have to be translated into concrete manure quantities. (Soil analyses are for instance carried out by various institutes involved in agricultural studies and research). On the other hand, pH values, nitrate, phosphor and calcium levels (indicated as N-, P2O5 and K2O levels) can be determined by quick tests which however require some knowledge regarding the appropriate handling of reacting substances which in addition are mostly of limited conservation. Could not and should not some members of the association specialize in this field?

- In the very large offer of fruit, vegetable and ornamental plant species it is difficult to find the species adapted and resistant with regard to the site and to prefer such species while purchasing plants rather than go for promotional offers of gardening stores. This can be very disadvantageous especially for long living fruit plants. Collective orders by the association could possibly help; the quality of the goods warranted possible rebates could be would be and negotiated. · The regular disposal of plant protection substances and paint residuals as well as of any other material, which needs specific disposal, is frequently linked to important efforts by allotment gardeners. A collection action could certainly help in this respect.

• It is obvious that the ecological oriented culture and use of a garden requires extended knowledge. The "old gardener" will have acquired such knowledge during the years and advisors in this field are available. But what about the newcomer? Would it not be appropriate to organize a basic training course for these newcomers? This would allow avoiding failures and in general promote the objectives of environmentally correct gardening. Organizing training courses on the association level would certainly be positive in this regard.

There are certainly still further and other approaches, which could deal with the objectives of the Agenda 21 in the domain of allotment gardens. The participation and contribution of allotment gardeners in the conception of "local agendas" are required in this field in order to propose solutions for existing problems.