

Urban Agriculture Support Programme

for Madhyapur Thimi Municipality, Nepal

Traditionally, municipalities in Nepal are defined on the basis of (the accumulation of) non-farm activities with agriculture considered a rural activity. This is one constraint confronted by efforts to promote urban agriculture in Madhyapur Thimi municipality located in the centre of Kathmandu Valley. How this problem was overcome together with issues of land development strategy is narrated below.

Land and for urban agriculture is now a significant component of the recently completed 'Development Plans and Building Regulations 2001' of the municipality. The Zoning Plan sets aside just about half of the 11.47 square km area as 'Reserve Zones'. After a two-year planning process, the board of the municipality was convinced of the advantages of an agriculture-based Reserve Zone and accepted the plan, though with great hesitation.

Transporting vegetables to the market



Kai Weise

DEVELOPMENT GUIDELINES AND BUILDING REGULATIONS 2001

The Madhyapur Thimi municipality, with an area of 11.47 km² was established in 1997 by consolidating five existing VDCs (Village Development Committees). In recent years, the municipality's

population has increased steadily to nearly 40,000, and the adjoining larger municipalities of Kathmandu,

Lalitpur and Bhaktapur have exerted mounting pressure as they have also grown at tremendous rates. As a result, a lot of new construction has taken place in Madhyapur Thimi, in a manner inconsistent with traditional set-

tlement structure, and urban sprawl has encroached upon what is actually still primarily agricultural land.

A principal tenet of the Madhyapur Thimi municipality's "Development Guidelines & Building Regulations 2001" is the creation of an Agricultural Reserve Zone. Most non-urban, fertile agricultural land has been placed in this reserve, while existing urban areas will be designated as Development Zones. The regulations mandate the municipality to prevent the development of any kind of urban infrastructure or utilities within the reserve zones. Only the construction of temporary structures will be condoned. The intent behind this regulation is to curb the loss of prime farmland to unplanned urban development.

The implementation of these kinds of regulations often appears to be difficult, especially since in Nepal the courts give greater weight to individual property owners' rights than to the enforcement of municipal regulations. Unfortunately, landowners often interpret this as permission to develop their land in whatever manner they desire, despite the potential degenerative effects this has on the community as a whole. Although a growing percentage of the younger generation has abandoned agriculture, currently 70% of the population still farms. The success of the Reserve Zone policy depends heavily upon the support of the farming community. In recognition of this, the overall municipal planning concept takes the needs of the farmers into serious consideration. The municipality will initiate several support programmes, to increase the profitability of agriculture and to take advantage of presently under-utilised local resources

such as nutrient-rich organic waste. These programmes will further focus on integrating agriculture into the overall urban development master plan. Rather than allowing the typical urban/rural dichotomy to create rifts within the community, cooperation and mutual support will be promoted.

THE NEWAR FARMERS

Agriculture has been the primary occupation of the Newars for hundreds of years, deeply influencing both their society and spirituality. Traditionally, Newar communities have lived in compact settlements on elevated ground, surrounded by their agricultural land. The Newars developed an intricate system of land classification, based on soil quality, extent of irrigation, crop type and ownership.

In recent years, farming families have found it increasingly difficult to sustain their previous standard of living through agriculture alone, thus many farmers have taken on secondary occupations, resulting in the slow deterioration of agricultural knowledge and practice in the Kathmandu Valley. Decreasing access to irrigation water has further compromised the economic viability of farming. Whereas 20 to 30 years ago rivers maintained at least a minimal flow year round, now due primarily to an array of detrimental human impacts on the environment of the Kathmandu Valley, rivers are practically dry during the winter season. These are just a few of the many factors which have contributed to an overall decline of agriculture in the Kathmandu Valley.

ZONING

The basis for the new Madhyapur Thimi municipality zoning plan was conceived in a workshop arranged by PAHAR Nepal in

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Potential strategies for integration as identified in the Programme:

- ❖ Create general community support for agriculture.
- ❖ Co-ordinate administrative and management efforts.
- ❖ Facilitate agronomic production.
- ❖ Develop marketing strategies for specialised goods.
- ❖ Promote localised processing and production of agricultural by-products.

June 1999 with financial support from the Swiss Agency for Development and Cooperation and with the participation of the Swiss Federal Institute of Technology.

The members of the workshop sought to determine the factors behind the current explosive expansion trends of the Kathmandu Valley. Traditionally, Newars have constructed their settlements on elevated ground, leaving the fertile lowlands and floodplains almost exclusively for agriculture. However, this pattern has been remarkably altered over the past 30 years. Building has continued as before on elevated areas, but in addition, new construction has also sprung up and burgeoned along roads in the previously undeveloped lowland areas. This indicates that roads act as the primary catalysts for new construction. In acknowledgement of this observation and in an effort to realistically assess potential reserve land, the workshop participants identified the lowland areas with minimal road access as target areas for agricultural zoning.

A group of municipality officials followed up on the workshop over the course of the next few months. The municipality's planning advisor prepared the "Development Guidelines & Building Regulations 2001" in close cooperation with several ward chairmen, the legal advisor and other technical staff. The Reserve Zone was initially conceived of as a conservation area, in which no urban expansion in the future would be possible. Elected municipality officials felt that this was unrealistic for economic and political reasons. Eventually a compromise was reached. The term "Reserve Zone" was adopted, and the municipality was given the authority to incrementally identify and plan out expansion areas within the Reserve Zone and release them for development in the future. As the preservation of agricultural land is one of the driving forces behind the entire concept, a legal mechanism must be set in place to ensure that decision-making remains transparent and responsible. Such a release of protected land would be contingent upon a genuine, documented need and subject to extensive community discussion. On the other hand, this system would also be

attuned to economic concerns. Should the disparity between the economic potential of the land in the Development Zones (the existing urban areas) and that in the Reserve Zones grow too large, sufficient political will could set an incremental release of Reserve Zone land into motion. The main attributes of the Reserve Zone remain unchanged. The area may only be developed for agricultural use, with non-permanent, single storey structures. In order to dissuade development, the municipality will not construct roads or provide utilities such as electricity, drinking water, sewage and telephone connections.

THE RESPONSE

The strongest opposition to the Reserve Zone came from those landowners, mostly middle-class government employees, who had moved to the Kathmandu Valley and had intended to build their residences on small plots of land. The municipality is now in the process of allowing the release of one such area for a housing project.

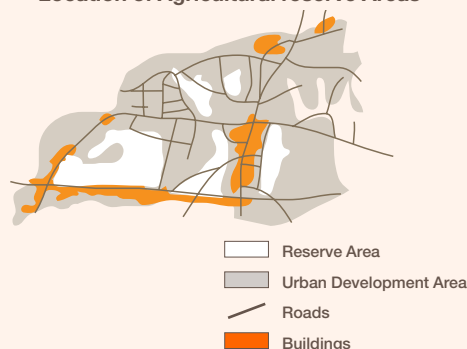
Both the municipal authorities and the farmers are supportive of the concept for urban agriculture. Preliminary studies

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show that the promotion of localised processing and production of agricultural by-products and developing marketing strategies will be the most essential components of an "Urban Agriculture Support Programme". The advantages for further municipal development of the agriculture-based Reserve Zone are:

- ❖ better allocation of limited financial resources;
- ❖ focus on "new" growth within the existing urban areas, which will promote

Location of Agricultural reserve Areas



denser urbanisation and efficient use of space in the Development Zones;

- ❖ proper sewage disposal and management of biodegradable solid waste through compost and manure production methods, enhancing agricultural development. This will turn a potential urban problem into a valuable agricultural resource and promote a community-strengthening interdepen-



Drying wheat on city square

dependency between the agricultural and urban populations; and

- ❖ ensuring that any release of Reserve Zone land be planned and controlled.

Madhyapur Thimi has become an example for urban planning in the Kathmandu Valley. Urban planners and government officials of other municipalities and the central government have shown great interest in the experimentation of integrating agriculture into the zoning plan of a municipality.

PROMOTING A SUSTAINABLE MODEL OF DEVELOPMENT

The preservation of agricultural land is vital for the sustainability of urban development in the Kathmandu Valley. The Madhyapur Thimi master plan will serve as a positive example of how urban agriculture can be integrated into the development scheme of a municipality. The reservation of open spaces within urban development areas, combined with the active promotion of agriculture as an economically viable source of income for the farming community and the urban population as a whole, will assist in controlling urban growth. Such a policy will result in higher land values and assure well-rounded family nutrition. Ultimately, the long-term prosperity and liveability of the Madhyapur Thimi municipality will be ensured for many generations to come.