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Institutional Barriers to the Application of Urban Village as A Tool for Achieving Urban Sustainability in Developing Countries - the Case of *Asheghabaad*, Isfahan, Iran.

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ABSTRACT: A number of new concepts have emerged in the last two decades whose proponents claim that if achieved, they would deliver more sustainable urban environments. Among them, New Urbanism and Urban Village are the ones with the most theoretical support and practical application. Both ideas, however, have been criticized in several grounds. But no study has been carried out to show the effectiveness of these new ideas in the badly needed contexts of developing countries. In this research, an experimental urban design study was carried out in a settlement in the peri-urban area of the city of Isfahan (Iran) to investigate the possibility of the application of the Urban Village idea as a strategy to achieve sustainability. The study revealed that significant deep-rooted institutional barriers in developing countries, particularly in a rural setting, stand against any progress in this regard. It is, however, suggested that the concept could still be useful, not as an urban design product, but as a process to help prepare the context for necessary change.

Keywords: urban design, urban village, sustainable development, *Asheghabaad* (Isfahan), institutional barriers, institutional change, implementation.

INTRUDUCTION

In the second half of the last century the world was once again witnessing a considerable decline in the quality and vitality of urban centres. The twenty first century promises a magnification of these trends, as we become a more highly urbanized planet. Various factors may be found to be behind this situation, including: population increase and migration, uncontrolled and rampant development of cities, loss of vital functions, unemployment and severe economic problems, urban blight, environmental degradation, and other social problems.

This has led many geographers, planners and economists to study and look for ways to describe the situation and means to control, guide and manage the A few concepts have been developing during the last few decades, whose supporters believe that once realized, they would lead to sustainability in urban areas. Among those concepts are compact city (Jenks et al., 1996), the edge city (Garreau, 1991),the poly centric city (Lynch, 1961; Lessinger, 1962; Frey, 1999), the urban quarter (Krier, 1998), the sustainable urban neighborhood (Rudlin & Falk, 1999), the eco-village (Barton, 1999; 2000), the millennium village (DETR, 2000), urban revitalisation (Wagner, Joder & Mumphrey, 1995; Teaford, 1990),

development patterns in these areas. Solutions presented by experts in various disciplines have not been able to prevent or even reduce the increasing rate of problems. Urban design, for example, has been mainly preoccupied with the urban core of cities. The only exception is in the case of new town development. Even in these cases, urban designers have not been successful in creating vital and meaningful environments.

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and the New Urbanism, Transit- Oriend Development, Traditional Neighbourhood Development and Urban Village (Katz et al., 1994; Calthorpe, 1993; Kelbaugh, 1992; Aldous, 1992, 1995, 1997, Gratz, 2003; Biddulph et al., 2003; Tait, 2002)

These concepts have become important in legitimizing and coordinating more finite elements of an underlying development strategy and in some cases providing a perceived deeper legitimacy to the act of planning. Gaining acceptance for these concepts and translating them into practice has, however, proved more difficult and the only one that is claimed to have resulted in any significant number of planned or built examples is Urban Village. In the late 1980s, the 'urban village idea' was introduced as a significant and legitimate approach for creating successful and sustainable neighborhoods. This approach was to compensate for the substantial failures of urban planning in recent decades and to revive valuable principles used in the successful shaping of cities in the past.

It seems that 'Urban Village' is becoming a significant element of urban planning and design today. In recent times, the term 'urban village' was first used by urban sociologist Herbert Gans (1962) in 1950s and later by Jane Jacobs (1961) in 1960s. The most fundamental influence in the emergence of 'new urbanism' in the United States and 'urban village' in the UK may no doubt, be referred to the writings of Jacobs. Since then urban village has been applied as a strategy in many cities throughout the world to serve different purposes, but especially to create and regenerate liveable neighbourhoods. In early 1990's the Mayor of the City of Seattle in the United States, Norm Rice, proposed a brave plan through which the future development of the city may be guided by a general web of urban villages (City of Seattle, 1993). In Australia, the cities of Sydney, Melbourne and Perth all have developed strategies to apply urban village strategies as means to reemphasise urban development at the neighbourhood scale. In the UK, urban village is now being used as the central core of policies and plans at national, as well as local scales.

Urban village has been criticized in several areas, one for being too idealistic, especially with regard to its neighbourhood element, two for the difficulties of its realisation, particularly when applied within the built-up areas of the existing environments, three for its principles that are not new in urban design and have been presented elsewhere before (Biddulph, 2000), and four for being deterministic (Cambpbell, 1996). Despite the criticisms, however, urban village, due to its promising potentials and attractive principles is increasingly used, particularly

inside the urban growth boundaries of large cities, to control and guide development and prevent disordered, unplanned and haphazard development in these areas.

In an effort to make the UV concept more applicable, Biddulph et al., (2003) suggested to change UV as a fixed concept to an unfixed one. They have used three case studies to describe some of the main points with regard to the extent to which urban village principles were actually applied. By focusing on such elements as: urban design, high-density development, identity and place making, community involvement, environmentally friendly design, pattern of open space, mixed use, facilities, public transport, self-sufficiency, and social sustainability they concluded that the ideal concept of urban village has not been completely achieved in any of specified case.

Crucial to this research, however, is what occurs in the process of implementing the urban village concept in localities and in the framework of certain fixed institutions. This is particularly problematic in the case of the developing world, where the institutions act as significant barriers to any kind of radical change through planning and design. National and local structures - institutions, planning regimes, community and social structures - as well as developers, planners and urban designers play a significant role in this regard. This study intends to focus on the possibility of the application of the Urban Village concept in a peri-urban area of a city (Isfahan) in a developing country (Iran) for the purpose of achieving sustainability.

THEORETICAL FRAMEWORK

Urban Village as a Concept

The literature on the subject is rather extensive. From the second half of the last century considerable progress has been made in this regard. Ewing reviews (1994, 1997) of the sprawl literature identify four 'archetypes' or characteristics of sprawl (see also Lessinger, 1962), Kelly (1993, p. 134) describes leapfrog development pattern. Other concepts include new polycentric metropolis (Bourne, 1992); 'polycentric' or multi-centred employment centres (Lynch, 1961, 1981; Gordon & Richardson, 1989,1997)'; 'edge cities' (Garreau, 1991); and 'multinucleated regional structures' and 'suburban downtowns' (Fujii & Hartsborn, 1995). It seems that 'urban villages', 'suburban activity centres' (Pivo, 1990; Neal, 2003; Biddulph, Fraklin & Tait, 2002; Aldous, 1992; Weitz & Moore, 1998) as well as 'decentralized concentration idea' (Frey, 1999) fall in this category. The legitimacy for the concept was derived through adoption of a variety of discourses such as: neighbourhood



planning concepts of proximity and locality (Biddulph, 2000; Madanipour, 2001), urban geography and sociology village-like characteristics in cities (Gans, 1962; Taylor, 1974), the urban design campaign (Biddulph, 1997), emphasizing design quality (Jacobs, 1961; Cullen, 1961; Lynch, 1981; Bentley et al., 1985 & Gehl, 1996), transit orientated development, pedestrian pockets (Kelbaugh, 1989; Calthorpe, 1993), traditional neighbor-hood development (Krieger & Lennertz, 1991) and achieving sustainability through Urban Village from early 1990's (Aldous, 1992, p. 25).

Aldous (1995) has suggested a few Urban Village design and development principles, in which neighbourhood constitutes the essence of urban village. Rudlin and Falk (1999) introduce some of the characteristics of ecological neighbourhoods, social neighbourhoods and model neighbourhoods and concludes that 21st century will bring us back lost time and balance through sustainable neighbourhoods. Some of the main characteristics they suggest are: limiting the size to a proper level, cohesive form, clear definition for the centre, desirable urban density, diverse and mixed uses, providing stores, work place, school, and residence for all income groups, employment opportunities, recreation, public services, reducing car dependency, easy access to public transportation, in planning access network due attention should be paid to car and pedestrian, simultaneously, diversity of housing types and an environment suitable for pedestrians (see also: Perry, 1929; Southworth and Owens, 1993; Southworth 1997). These principles, which make up the main elements of the Urban Village concept are indispensable parts of urban policies and urban development guidelines in many cities these days. This is, in many ways, a major departure from modernist principles.

Urban Village in Use

As it was mentioned earlier the application of the concept has faced several major problems, including: contested meanings and interpretations (Taits et al., 2002) and the problem of implementation (Biddulph et al., 2003). There are many who argue that the thinking behind the respective concepts is utopian, nostalgic and deterministic and that it is based on a flawed premise about contemporary constructions of community (Audirac & Shermyen, 1994; Thompson-Fawcett, 1996; Southworth, 1997). Many evidences reveal that built examples of the concept generally do not match the vision, since in addition to giving substance to a 'cloudy paradigm' (Thompson-Fawcett, 2000, p. 278), they are also subject to the whims of developers, the proclivities of residents

and the reality of legal, administrative, economic and social forces (Leung, 1995; Southworth & Parthasarathy, 1997; Barnes et al., 2006).

Even in the UK, where, as Biddulph puts it 'urban village is everywhere', approaches to development such as this do not work because of the absence of a robust basis for the concept (Biddulph, 2000). The emphasis on local self-sufficiency is completely at odds with the mobility and fluidity of use that were the cornerstone of economic viability and responsiveness. Physically constraining the citizens' sphere of experience is also at odds with their likely mobility and their right to choose the patterns of their lives. Some criticisms focus on its physical determinism, and consider it as immature idea (Biddulph, 2000), and not a comprehensive strategy to solve all problems of contemporary urban environments. Others see it as naïve and anti-urban (Sennett, 1977, 1990). Biddulph (2000) argues that "a city is not a number of villages glued together", and Biddulph et al., (2002) have questioned the validity of the urban village concept as a real contribution to sustainable development. They further (2003) assess the extent to which the urban village, as a lived experience, accords with the intentions and perceptions of those who promote and use it and whether the principles of development accord with user

The focus of this study is on the institutional barriers that stand against the successful application of the Urban Village concept to achieve sustainability in peri-urban areas of large cities. There are various interpretations of the concept of institution, ranging from formal constructions such as legal regulations and organizations, to behavioural patterns such as habits and traditions (Morrison, 2006). For the purpose of this study we interpret institutions as the political, legal, governance, administrative, social, cultural and behavioural structures through which urban design and planning decisions are made and implemented. The institutional context consists of formal, planned institutions such as government organizations and regulations, and more informal, evolved institutions characterized by ground rules: institutions as interaction patterns that structure behaviour and define the space within which actors act, select problems and solutions and set priorities (Ostrom, 1990). Institutions as ground rules strongly influence the perceptions of players of their role, tasks, and responsibilities in the process of problem definition, solution sought and implementation mechanism and effectuation. Actors act within institutional structures. The question is to what extent does these structures affect the action and behaviour of actors (Hendriks, 1996; 1995, Weimer 1995).



RESEARCH METHOD & PROCEDURE

The method used in this study is an experimentalexplorative urban design process to explore the possibility of the application of urban village concept in a community in the fringe of a large city in Iran for the purpose of achieving sustainability. In 2007, the Restoration and Renovation Organization of the Decayed Areas of the City of Isfahan (here after Organization), Iran, was considering conducting an urban design study for a small community in the peri-urban area of the city. The study began under the title of: Urban Village as an Urban Design Strategy to Achieve Sustainable Development in Asheghabaad, Isfahan, Iran. The Organization, though unfamiliar with the concept, curiously expressed interest and readiness to give the idea a chance. This was mainly due to the fact that previous urban design studies had resulted in complete failure (Bahrainy & Aminzadeh, 2007; Mazumdar, 2000). Through several meetings and presentations on the theory, content, purpose and procedure of the UV concept and its advantages against the traditional urban design approaches, the authorities became convinced that the concept could be what they actually needed to overcome the overwhelming problems of the peri-urban areas of the city.

The study began with a literature review on the origin, theory, and principles of the concept on the one hand, and its criticisms due to its shortcomings in implementation in different contexts on the other. A group of 17 graduate students in the Urban Design Program of the Art University of Isfahan were assigned to work on the project, following a collaborative urban design process based on UV principles. Since the idea was new to students, they had to be taught of the differences between UV approach and traditional urban design practice. Their task began with a review of existing plans for the area, collecting information on various aspects of the community, carrying out field studies and analysis, which revealed the community's present problems and potentials, as well as envisioning several future scenarios, assuming no intervention. On the basis of all these analysis some design guidelines were formulated to lead to the realisation of the UV concept in the area. Our initial premise was that the application of the concept to this community, which was suffering from many different growth problems at present, and more intensified ones in the future, will take the burden off, guide the growth, and eventually lead to the sustainability of the community.

This looked like a good opportunity for this experiment at the beginning, should it have been successful it could be used as a model in similar problem areas. Immediately after the study started, however, difficulties began to spring out. It was soon realised that there are numerous obstacles against the successful application of the concept in such an environment. The client was only familiar with the typical face-lifting type of urban design, which are common practice of all consulting firms in Iran. Numerous contacts with local residents, representatives, and local council members intended to pave the way for their active participation in the project formulation and support of its implementation did not work. The negative impression of the residents toward government intervention through any kind of planning, which has been accumulated through time, was a difficult problem to tackle. All these led us to this important conclusion that institutional barriers stand against any major change in those communities, and therefore, urban village cannot be used as an urban design product, but rather as an urban design process to prepare the context for such a change.

Throughout the design process, from the recognition stage to implementation and effectuation, the obstacles facing successful completion of each stage were recorded, classified and analysed. Emphasis was, however, on the implementation stage, where ideas are to be turned into actions. This is the most critical stage in the urban design and planning process in those countries. The institutional barriers to application of UV concept in the community were then presented under several important categories.

THE CONTEXT

Lack of appropriate planning and design strategies to guide and control development in Iran during the modernization era has resulted in chaotic and unsustainable development patterns with serious adverse impacts such as: intensified primacy of the city of Tehran, overcrowding of towns and cities, aggravated sprawl trend in all urban areas, loss of agricultural land, desertion of villages, decaying of city cores, steady creation of slums, increasing gap between city and village life, car dependency in cities, increasing water, air and soil pollution, dependency of large cities on remote areas for basic needs such as water, food, fuel, etc., collapse of vital functions, deterioration of environment, disappearance of traditional/vernacular styles of living, architecture and urbanism. The end result of all these events is the continuous decline of the quality of life in urban, as well as rural areas (Zebardast, 2006). Many villages situated on the fringes of cities, including Asheghabaad, have been encroached upon by urban expansion and are inhabited by large numbers of migrant workers. Most of urban problems in the developing countries come from these areas (Zheng et al., 2009; Habibi et al., 1992; Zebardast, 2006).

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Asheghabaad is a small community, of rural origin, of about 12,000 population in 2008, and an area of 120 hectares in the northwest of the city of Isfahan, which falls inside its growth boundaries that displays an increasing development trend in recent years. A main access road connects the settlement through a highway to the city of Isfahan, to the nearby industrial sites and other settlements in the area. The community has been under tremendous pressure for development due to population increase, rural-urban migration and migration from neighbouring countries. These forces have led to urban sprawl and radical changes in the land use pattern, as well

as urban blight in the settlement core. The best fertile land has been turned into dwellings, which are spread randomly throughout the area.

There are some indications that *Asheghabaad* has been around for about 1400 years. Up until recent developments during the last four decades, the whole area was agricultural land with a few scattered small villages (Fig. 1). Irrigation has been mainly based on underground canals *(qanaat)*, but this system has become less functional recently due to the over-use of underground water and the depressed aquifer.

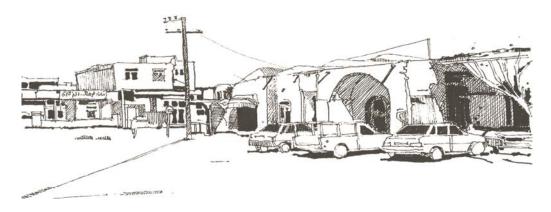


Fig. 1. A general view of the old section of Asheghabaad (Source: the authors).

It was in 1967 comprehensive plan of the city of Isfahan that for the first time Asheghabaad was recognized as a small settlement, but no action was taken at this time to change its status (City of Isfahan, 1967). The decision to include Asheghabaad within Isfahan's boundaries in 1996 and also the establishment of large scale industries and other activities in the area, along with its strategic location, dramatically changed the rural character of Asheghabaad and prepared the context for an unprecedented chaos and transition (City of Isfahan, 1996). A revised plan in 2008 proposed major intervention in the settlement by complete demolition and renewal of old buildings, widening of alleys and streets, and turning the rural character of Asheghabaad into a typical fringe development (City of Isfahan, 2008). These developments have resulted in several major problems, to be summarized in Table 1, in following categories: general character, land use, transportation, environment, physical structure, demography, economy, life style, and participation (Fig. 2).



Fig. 2. Location of *Asheghabaad* settlement (in circle) in the peri-urban area of Isfahan.



Bahrainy, H. et al.

Table 1. A summary of Asheghabaad's critical problems (prepared by the authors).

Participation	Lack of sense of belonging results in lack of interest in participation,	Strong self interest vs. very weak public interest No social responsibility	No defined system/ mechanism for participation to represent all interest groups	Organizations act as trouble makers, rather than collaborators	No active NGO's In the community	Dissatisfaction With local Authorities over past actions. No accountability,	Residents do not trust organisations involved in planning and design, no Incentive for participation
Life style P	L Inward looking b Culture/life in	S ii High value for w privacy ii	Minimum Value for public space /life - Family structure to	Strong family ties a	Strong desire to become urban and I modern	I / / / / / / / / / / / / / / / / / / /	A D FI G
Economy	Low economic resources and incentives	Prolonged draught has damaged agriculture	Huge gap between city and village in jobs, Income and public services and amenities	No interest on the part of private developers to invest in the area			
Demography	Over half of Population is not native to the area	Extended households, due to socio- Economic factors	In-flow of young male workers & Criminals has caused security concerns	Jobs In agriculture have been discouraged by previous plans	Poor sense of unity and Cohesion among residents	High percentage of population is younger group with extensive demand for education, job and public services	Public awareness with regard to the present and future community issues is very low
Physical structure	Low quality of construction: Building materials and techniques	Out-dated / obsolete infrastructure	Lack of advanced irrigation system	Low quality and sub-standard housing stock	Higher-level plans have undermined neighbourhood structures	Higher level Plans undermined The integrity of The physical Structure	Change in population composition has changed the Traditional Structure of the community
Environment	Pollution from industry, traffic and warehouses Is a serious concern	Serious hygienic problems	Large quantity of sewage discharged to nearby farmlands	Indigenous knowledge faded, modern knowledge is not in order	Energy waste seen in all areas and activities due to cheap prices	Noise pollution from surrounding arteries +health hazards from high-voltage lines going through village	Waste disposal In all open spaces inside and around the community
Transportation	Previous cardependence plans: widening of roads and alleys+parking	Inadequate and inefficient public transportation	Inefficient spatial organization, lack of hierarchy in accessibility network	Poor access to recreation, education, health and work places	Polluting uses within residential areas	High propensity to own and drive	Remote job locations encourage driving
Land- use	Large-scale uses undermines the integrity of the settlement	Demolition of the core area as proposed by the previous plans	No value for social life/space. Private and family life is dominant	Significant land- use changes: particularly from agriculture to residential	Lack of hierarchy in distribution of Land-uses	Disordered pattern of land-uses is resulted In the collapse of neigbourhoods	Change in landuse patterns is resulted in radical change in behavior patterns
General character	Loss of traditional rural character, no replacement by urban one	Parasite for the City, jobs and services dependence	Ambiguous dual character (urban + rural)	Low quality of life and poor living conditions	Residents' desire to leave the village and reside in City	Residents' negative attitude towards the term 'village'	Complicated informal and formal legal and administrative structure



As the content of Table 1 indicates the area is under tremendous environmental, social, economic and development pressure and therefore, in great need of some effective tool to control, guide and direct its growth toward a sustainable condition. It was under these circumstances that the Urban Village concept was suggested to replace the typical ineffective tools of the past.

THE URBAN VILLAGE PLAN

The design process suggested three levels of strategies for the area. The first level covers an area of 150 hectares. The second level deals with the spatial organisation of *Asheghabaad* community as an Urban Village, with five neighbourhoods (Fig.3). The size, population and special role and function of each neighbourhood are determined at this level. The third level deals with the design of each neighbourhood (City of Isfahan, 2010).

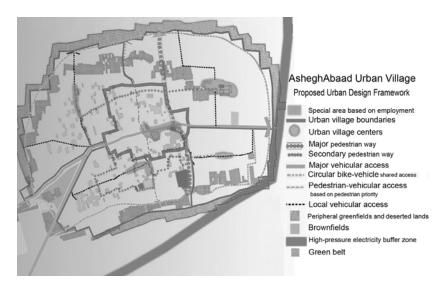


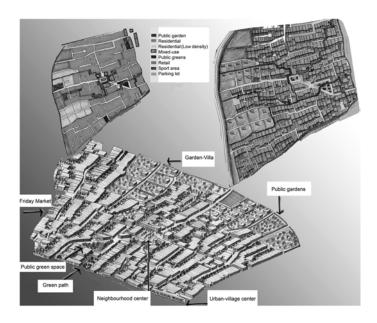
Fig. 3. Asheghabaad Urban Village with its five neighbourhoods

One of these neighbourhoods plays the central role for the whole community. Population projection was estimated at 20,000 for the year 2022, on the basis of last 10 years' trend. The average density is considered 100 to 200 persons per hectare. The neighbourhood in the centre is planned to have a higher density to act as a focal point for the community and create a sense of identity. Each neighbourhood will have its unique character, drawn from its historical past. The two western neighbourhoods carry their significance from their locations as the main entrances to the urban village. Northwest neighbourhood has public orchards at the edge, the southwestern one has significant religious centres, and finally the one on the northeast side is unique in the way that most of its residents work in the same area. Each neighbourhood will have its own service centre to facilitate relative selfsufficiency in basic needs. Walk-ways connect all centres to each other and to residential areas and other activities.

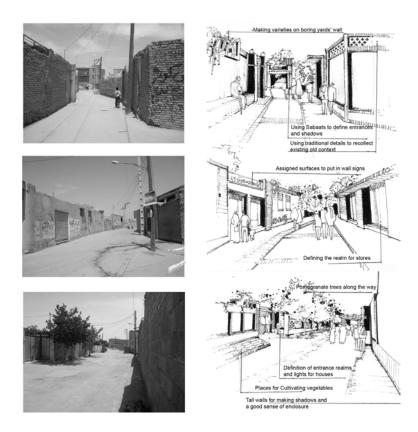
At the third level, plans include the design of neighbourhood structure, public spaces and housing types. These plans aimed at utilizing the area's potentials to revive its cultural heritage and liveability, combine the calm, natural beauty and tenderness of village life with the functions and services of modern life. The intended community is to have some degree of self-sufficiency, provide walkability, protect its agricultural land, revive neighbourhoods, and strengthen the sense of belonging among residents. According to the plan the buildings with quality and historical value will be preserved, renovated and reused to help to the vitality of the neighbourhoods and the community. The quality and vitality of public spaces will be promoted through activity centres in the neighbourhoods. New buildings will be built on the basis of traditional patterns, which will create a sense of local identity. Local traditional building patterns will provide genuine identity and character to the community. Organic and human-friendly forms, spatial hierarchy at all scales, from a house to the neighbourhood centre, and a desired combination of physical elements with nature will help to promote local identity (Fig. 4 and 5).



Institutional Barriers to The Application of Urban Village



 $Fig.\ 4\ .\ One\ of\ the\ proposed\ neighbourhoods\ and\ its\ components\ in\ the\ \textit{Asheghabaad}\ urban\ village\ (Source:\ the\ authors).$



 $Fig. \ 5. \ Existing \ (left) \ and \ proposed \ (right) \ alleys \ and \ public \ spaces \ in \ a \ neighbourhood \ in \ Asheghabaad \ (Source: the \ authors).$



Proposed residential areas are compatible with the natural setting and are based on vernacular principles and concepts. Small-scale production and service activities with least or no pollution will provide employment opportunities for most of the residents within the neighbourhoods. Increase in green space and promotion of transportation networks may eventually reduce the present social and physical disorders and create a proper setting for the reflection of spatial values, improvement of environmental quality, health and wellbeing of the community. The emerging urban village was expected to create a sustainable income source for its residents, along with environmental and social sustainability. Providing green space, from the small scale of houses (private) to the large scale of parks (public), will not only contribute to the amenity and beauty of the community, but also produce fruits, vegetables, etc. in order to complete the production-consumption cycle and help self-sufficiency, and eventually improve the quality of living and the vitality of the community. Access network is based on public transportation, cycling and walking. The structure and design of urban village will discourage the use of private cars, especially within the neighbourhoods and the urban village.

Small-scale land-uses are distributed throughout neighbourhoods on the basis of the hierarchy principle, relative self-sufficiency, behaviour patterns and life cycles of the residents, as well as the existing community setting. A criteria used for this purpose was walking distance to essential daily to weekly needs, which is 300 to 600 metres. Further development on the agricultural land and green areas is forbidden, and scattered and haphazard developments are prevented.

Efficient use of natural resources, including fuel, land and water is regarded as a significant step toward achieving sustainability. To this end, conservation and recycling of water in such a hot and arid climate is crucial and is taken into consideration at all levels and aspects of planning and design. Physical patterns comply with the area's micro-climate. Walking and cycling and also the use of passive and indigenous methods of cooling and heating, and traditional building materials will, to a large extent, help the conservation of fossil fuel consumption. Existing greenfields surrounding the community will be used as green belt to limit the growth and prevent outward spread of development.

ANALYSIS

In this section major institutional elements which stand against a successful application of the UV concept in the peri-urban area of *Asheghabaad* will be discussed. It is obvious that many of these barriers are common to all types of planning and design in such an environment. However, the application of the UV concept adds new dimensions and complexities to the problem, due to its requirements for radical change. These barriers are broken down into three categories: stakeholders, procedural and substantive elements.

STAKEHOLDERS

Residents

Since the majority of residents (60%) are not native to the area and are regarded as transient, they do not have any sense of belonging and responsibility toward the future of the community and therefore no interest in participating in any public activity. Even in the case of those who participated in the process, dominance of self-interest over public interest was quite visible. Almost all residents did not have any knowledge of future plans for their community and the reasons why such plans are formulated.

Also the majority of residents do not trust the local council, designers and the agencies responsible for the development and implementation of the plans and therefore were reluctant to participate in the decision-making process. While the traditional informal organizations that have governed the community throughout the history are weakened, no formal system has been set up to organise and represent the interests of individuals, community and organizations. No active NGO, for example, has been formed to represent, advocate, educate, mediate residents and prevent any decision that would have an adverse impact on their lives and the environment.

Developers / Investors

Actual realisation of the UV concept depends heavily on the existence, ability and willingness of potential private or public developers to invest in different parts of the project. In this case the responsibilities of relevant organizations for implementation of the plans were not specified. But also the incentive to invest in such an area is generally low. Investors are only familiar with the typical renewal and construction projects, which is against the flexible and gradual shaping and reshaping nature of the urban village concept. Uncertainty about





investment return and speculation has led to the lack of interest on the part of investors/developers (private as well as public) to accept any risk. Local government focuses mainly on pavement, landscaping and beautification of public spaces, and the *Organization* works only on single buildings.

Client

Although the principal client—*The Organisation*—approved and supported the idea of applying the UV concept, its personnel however, were not familiar with the concept's content, procedure and requirements. Their expectations of the plans were unknown to designers, which led to a communication gap between the client and the designers throughout the process. It was probably for this reason that the client was reluctant to fulfil its obligations--payments were not made on time, decisions were not made as required, necessary maps, data and information were not made available to designers. All these led to a late start and delays in the design process.

Designers

Since the idea was basically new to the country, most members of the design team were not adequately familiar with the concept and therefore, there were no consensus on the meaning, role and function of the concept. The idealistic-nostalgic position of some designers with regard to the concept and their willingness to apply every detail of the fixed concept literally into the existing context resulted in still less practical plans. The client and designers had conflicting views on the main issues of the concept. There were also conflicts between the plans prepared on the basis of the UV concept and the contents of the Comprehensive Clan, Detailed Plan and the Revised Detailed Plan. Urban design plans are traditionally regarded as blueprints that should be implemented in every detail by public agencies. This is based on the notion of autocratic or up-down decisionmaking and implementation, which is not compatible with the essence of the UV concept, which requires a communicative and collaborative process.

PROCEDURAL-ORGANIZATIONAL

Legal

Existing rules and regulations at various levels are too general and inadequate to support UV application in the community. For example, there are no specific rules for the value-added properties, or the existing rules on urban land have turned land into a speculative commodity. To set local-specific rules and regulations to serve the needs of UV would not be possible, due to the existing fixed institutions. Residents do not comply with existing rules and regulations, although inadequate. Violations would lead to penalty, which is regarded as a significant source of income for the community.

The process of plans adoption is long, complex and time consuming. It has to go through many channels at various levels and with participation of representatives from several organizations, groups and committees; representing the client, the city, districts, strategic committee, and task force committee. The conflicting views on issues make the lengthy process useless, erosive and frustrating. Mention also should be made of another serious obstacle against any major change in the physical structure of the community. Vast area of land is under the control of the *Awqaf* (a charity Organization), which makes any intervention and change in these areas practically impossible, or at best very limited.

Economics

The unhealthy and dependent economy (on oil) has prevented planners at various scales to promote other sectors, such as agriculture. To secure the basic needs, the government is mainly relying on imports, rather than promoting local production. Lack of a long-term-sustainable economic view among all parties involved has resulted in serious environmental degradation, poverty and social decline in the community. Urban managers and investors willing to invest in activities with short-term return, such as speculative land and construction, and not in public activities and community services which cannot be justified economically. Also low-income level of residents would not allow their active support of the plans.

A new tax system has not been formulated to replace the existing taxation system, which is based on the idea of selling density to provide income for the community. This is contrary to the idea of using density as a tool to promote liveability, walkability and eventual sustainability of the neighbourhoods and the community.

Cultural Issues

The dominant distorted perception among residents, and also authorities, that all aspects of rural life, compared to urban life, is backward, obsolete and old-dated prevents any activity to lead to the improvement and revitalization of the community. Many managers regard the idea as imported from the West and therefore, resist its application here. Low public awareness and knowledge



about the current critical issues of the community and possible future crisis does not allow a reasonable analysis of the problems and the solutions.

The universal automotive life, which is now accepted by the residents and authorities as the only way of life and has been facilitated and encouraged by previous plans would not allow any change in behaviour patterns, at least in the short-run. Although car ownership is relatively low at present, but the propensity to own a car is increasing with an accelerating pace. It would be impossible to stand against this trend, which is in the opposite direction of lowering car-dependency.

As it was stated earlier, a high percentage of residents who are non-native to the area, such as Afghan refugees, do not have any sense of belonging to the area and no interest in participating in any effort toward its improvement. The traditional inward-looking lifestyle and the significance of privacy for families make the issue of public space and social life less important. What intensifies the problem is that it is not acceptable culturally for women to participate in any public activity or to use public places. This gender discrimination is a serious obstacle to the realisation of UV concept in the community. The change of population composition and location, which is supported by higher-level plans, would not allow the urban village structure (neighbourhood units) to emerge. Some residents prefer to have their jobs and work places unknown to others, so they choose rather far locations for work. This makes the realization of mixed use and self-dependence neighbourhoods impossible.

Administrative/Managerial

The principal client to be the sole agency responsible for the project and make the design team accountable for the plans, and also to coordinate activities throughout the design process had not been specified. This was particularly serious in formulating the plan's visions and policies. It was not known, for example, whether a deputy in the City, or the Organization, is the main and direct agency responsible for the project. The contract was signed by one agency, financed by another, reviewed by the third one, adopted by still another, and the implementation agency was not known. The unclear duties and responsibilities of relevant agencies led to the lengthy and time-consuming process of corresponding with the Organization and other involved agencies with regard to the issues raised during the design process. The control and adoption of the plans were delegated to a strategic committee, which is composed of unqualified personnel with no university education. Present administration system is only familiar with typical quantitative planning

proposals or typical blueprints. Qualitative design issues and new ideas are not of their interest.

Duration of management is usually short, that is why managers are not willing to take the risk of long-term project, which is based on uncertainty. They wish, rather, to see projects are realised during the short period. Small scale, physical, short-term projects, therefore, are preferred to long-term projects with intangible results. Hidden management, informal organizations and personal interventions always have a powerful role in decision-making processes in developing countries. This makes effective, rational and explicit decision-making difficult.

DESIGN

It was intended from the beginning to follow a collaborative urban design process to apply the UV concept in the community, which is seriously suffering from many different problems. Several significant obstacles, however, stood in the way. It was difficult to include new ideas, such as walkability, mix use, less car dependency or change of life style, which require a new physical and cultural infrastructure into the design proposals. These were substantially different from the common norms of practice in the community.

Uncoordinated parallel design and planning initiatives by various organizations at different scales, lead to uncertainty and conflict in the decision-making environment. Isfahan Comprehensive Plan, for example, is going through a revision that could undermine all the decisions made by the UV group, or the plans made at the higher levels are based on car dominancy, which make walkability and pedestrian-oriented design more difficult to achieve. Product-oriented design, which lacks flexibility to adapt to new changes, is generally preferred to process-oriented design

SUBSTANTIVE ELEMENTS

Physical Structure

One of the essential elements of the UV concept is neighbourhoods. Theoretically it is ideal to divide a settlement into several parts, which are physically, socially, and economically defined and separated from each other (Madanipour, 2001). This could supposedly solve most of today's urban problems. But this idea belongs to the past and its recurrence seems impossible. The high rate of population mobility and social pluralism makes the realisation of the idea far more complex than ever before. It is no longer possible to create strong social



Institutional Barriers to The Application of Urban Village

bonds that only develop through long-term stability and common experience. Subdivision of the city into distinctive neighbourhoods may create further social fragmentation rather than the planned social cohesion. In societies where individualism, inward-looking life and extreme privacy have continuously been a fundamental principle, there is no doubt that social relations are not a priority (Madanipour, 2001; Biddulph, 1997, 2000). Considering that neighbourhoods are regarded as the essential component of the UV concept, and all other elements heavily rely on this element, there is serious doubt it could be revived as in the past. The change of population composition and location, which is supported by higher-level plans, would not allow the urban village structure (neighbourhood units) to emerge. The selfdependency, therefore, cannot be not realised.

The physical structure of the community has been disintegrated by the widening of access network and demolition of the central core as proposed by higher-level plans. Construction of large-scale buildings in the village (beyond its capacity) for commercial, cultural and recreational activities has further destroyed the spatial-physical cohesion and unity of the area to the extent that UV is not capable of fixing it.

Social and Demographic Structure

As stated earlier, the majority of population are emigrants with a short history of living in the area who do not have a sense of belonging to this place and therefore, do not care for its improvement. This is especially true with regard to criminals who see the existing deteriorating condition quite suitable for their activities and therefore, not only are not interested in cooperating for its improvement, they might even resist any positive changes. For low-income residents, improving the quality of their environment is not a priority. Their priority is securing their essential needs-employment, housing, and public services. To most residents, employment in agriculture is demeaning, compared to industry and services. Industrial complexes around the community draw workers toward those activities. This will prevent urban village and the neighbourhoods to become selfdependence.

Technology and Infrastructure

New and advanced technology has not been introduced to the community to be used for irrigation, communication, and transportation. Any improvement in these areas will require heavy investment, for which neither the residents nor the local government can afford the cost.

Transportation

Construction of a Metro line, which was expected to provide a fast and affordable public access to and from the area, has been delayed due to budget shortages. At present only 50% of residents own a car but this ratio is increasing rapidly toward a car-dependent community. Changing this trend means moving against the current and people's desire for mobility, which seems impossible. The dominance of car in higher level plans make walkability and pedestrian- oriented design in the UV concept more difficult to achieve. The relationship between car industry, urban design, and life style is similar to that of General Motors era in the USA. Each supports the other. The dominance of modernists' ideas of designing for the car, rather than pedestrians on the part of decision-makers and planners, has made the realisation of proposed pedestrian paths and reduction of car dependency in the neighbourhoods impossible.

Land Use

The existing pattern of land use and access networks did not allow the neighbourhood centres to be applied to all areas of the village. Large-scale regional services and activities proposed by higher-level plans in the south part of the village undermine the neighbourhood scale and character. Residents and authorities prefer income-producing land uses of commercial and residential activities over green and public uses. Adapting the existing linear structure of the settlement to the proposed neighbourhood units of the UV concept is not easy. Pedestrian and automobile access networks, distribution of public services and facilities, and all other related uses could not therefore be realised as planned.

CONCLUSION & RECOMMENDATIONS

The study not only confirms earlier findings of the limitations of the Urban Village concept to achieve sustainability in urban areas in the developed countries, but also further emphasizes the institutional barriers against such an application in the case of the developing countries. This becomes more critical when we accept that the institutional landscape in rural environments is more complex than urban areas. The idealistic nature of the concept which is common to all its applications, on the one hand, and particularly the institutional structure of the developing countries, on the other, would not allow successful application of any element of the concept and the realisation of sustainability in the urban areas of these countries. Achieving rural sustainability depends on



the creation of national, regional and local institutions, which in turn, requires building strong communities and exercising active responsible citizenship.

Analysis of the relevant substantive and procedural elements and the stakeholders, in the case of Asheghabaad, Iran, revealed that all of these elements, individually and collectively, work against any substantial change in these contexts, including application of the UV concept. There is, however, no doubt that the increasing unsustainable trend of the peri-urban areas in these countries are in urgent need of some effective tools and mechanisms by which to control and guide the chaotic development in these areas toward sustainability. But this requires a radical change in the institutional structure of the communities involved. If the UV is used as a flexible and 'unfixed' concept it could help to prepare the context for change through education, public awareness, social learning, capacity building and empowerment. These could be regarded as the key to change and urban village as a mechanism for democracy and local self-sustainable development. In a society where almost all decisions are made on the basis and in the framework of autocratic and up-down mechanism, Urban Village cannot be applied according to a democratic, participatory process.

Our final conclusion is that sustainable development after all, can be considered as an on-going learning process—a procedural approach—in which perceptions are exchanged, knowledge transformed, plans at different levels coordinated and information disseminated. The substance of the problems and the actions needed to address these problems—which include governance arrangements, the nature of sustainable urban development, the causes and effects of unsustainable development and the necessary actions to change the trend—should be all collectively understood. This requires a substantial change in the urban design process to become open, participatory, and collaborative and regard implementation as its integral part.

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