

# High Tech and High Touch in Chinese settlements – communication and sustainability in the EU-project SUCCESS

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## 1 HIGH TECH AND HIGH TOUCH

From the welcome speech of a village leader addressing a Sino-European expert team coming to his village:

我非常高兴，今天你们能到这里来，跟我说这么多话，  
我一高兴也许能再活一百年。 我也没啥要求，  
我最后只有一个要求：  
希望你們今天中午能留在这里吃吃我们的家常饭

I am very happy. Today, you people can come here. With me, you talk so much. So perhaps I can still live until I'm 100. I have no other wish left. I have but one final wish: I hope today at noon time you can stay here at my place and eat and share our daily food.

## 2 INTERVIEW OLD MAN IN XIAFUTOU, PROVINCE HENAN, CHINA, MARCH 2003

The experts bring two things to the village - high tech and high touch. High tech is the knowledge they bring with them, their instruments, their digital devices and also the way they organize their research. This information will be part of the village life.

But they also become part of the high touch in the village: not only do they share their knowledge with the village people, they should also share their day-to-day life with them. In terms of the village leader: they should share the normal, daily food – not a specially cooked meal as for festival days. No, the invitation is to become part of the daily village life and its conviviality.

The combination of these two kinds of communication makes him so happy that he now has enough happiness for the rest of his life - until his 100th birthday.

With the study team, the new time, the era of globalisation has arrived in this tiny remote village in a central Chinese province: a team of 20 Chinese and European experts has landed in their village to help them to develop sustainable future images.

This astonishing high tech event is inserted into a fully traditional life: high-tech ideas for energy, agriculture, economy, socio culture, communication brought here by its first ambassadors.

For the ex-village leader, this high-tech event needs to be compensated through high touch: to do so he invites these strange people to have lunch with him – high touch, the form of information that is familiar and therefore can be trusted.

Talking about a process of sustainability is a task that requires both: High Tech and High Touch. Even in a tiny Chinese village, the globalisation era calls for a presence in the global village – and all over the country, regional development plans reach even remote rural villages. Thus High Tech is wanted and needed and has its effect. But sustainability as an effective process for a transformation that can actually take place in China is just as important: Only if the topic reaches out to every dweller in the village, and specially to the village dwellers as a coherent human community, will they uncover future images and the related effective fields of action.

In the Chinese as well as in the European context, sustainability is a relatively new notion. Whereas in Europe, it is a concept born in post materialism and postmodernism, the Chinese concept of transformation unites all these factors in one: the village needs and wants modernisation, but it also needs and wants to preserve some aspects of the life qualities inherent to any traditional society that leads back to pre-modernisation times (in Chinese time terms).

As sustainability is part of the concept of post modernity, it gets its main features by its critique of American-European, so-called western development concepts. Yet even the proponents of the concept of sustainability live with all the benefits that modernity has to offer.

The sustainability concept, therefore, is possible for a threshold country like China only if it takes seriously the need for modernisation within the critique of this modernisation.

How to combine the need for a modern quality of life with new communication technologies and the local management of sustainable development within the limits of nature for the next generation, and how to discover potentials and spaces of possibilities (Möglichkeitsräume) where the villagers can develop future scenarios and future images is the core topic for Chinese rural development. In the work of the SUCCESS project in small Chinese villages, the research team accompanies and assists local villagers in discovering their path to a modern way of life within the limits of nature, including aspects of an urban lifestyle combined with the potentials of a rural life based on agriculture.

In a village with dirt roads, with no or little home heating or cooling devices, with no other employment than the hard physical labour of agriculture, without access to the new information media except for official Radio- and TV-programmes,

the need for development of the physical infrastructure and for better services is manifest to every serious visitor. But the interviews that we made in these villages show that there is a need for modernity beyond its practical dimension, we found a wish for symbolic change even more than for usefulness. This is the case, for instance, for the houses: "*The old houses are not good. They are not modern*". (Film maker 6) The village film maker considers the new house as a value although the glassed in balcony is not used at all. "*Newly built house is a sign for personal wealth*. ("filmmaker interview 2). In all case study villages there is an ongoing discussion between people about the old traditional poor life and the modern new life that they consider the icon of emerging wealth. The symbol for the new modernisation is the new house. Even if the houses are not practical, the house is a symbol for the newer and better life.

The following article gives an overview about the high touch areas of Chinese village communication and the places where it happens. The results presented are based on the experiences of all seven case study villages of the SUCCESS project, but the examples we have used are taken mostly from the villages of Beisuzha in the province of Hebei, of Xia Futou in Henan and San Yuan, province Yünnan. The SUCCESS project shows the combination of scientific investigation with the combination of high tech solutions from the Sino-European expert along with the case study field work which is a high touch process.

The concept of high tech-high touch came about in a conversation between Heidi Dumreicher and the trend-researcher John Naisbitt about life quality held in Vienna in 1999: we felt that we need both, a combination of good neighbourhood and a link to the global village, a will of preserving the near and well known allowing also for the far away.

### 3 THE SUCCESS PROJECT

The SUCCESS project – Sustainable Users Concepts for China Engaging Scientific Scenarios<sup>1</sup> – develops and carries out seven case- studies of peri-urban and rural settlements in six different provinces in China. The project started in September 2002 and will continue for another two years.

In this interdisciplinary project the following disciplines work out sustainable future scenario's for the villages: economy, ecology, socio culture and architecture. SUCCESS has a strong bottom-up approach, combined with top down elements. The basic question of the research is what to maintain and what to change. From a proto-sustainable Chinese village to contemporary sustainable village systems - this process supports an emergent future, respecting human needs combined with the needs of nature.

The theoretical basis of this project is the fact that in the chosen Chinese settlements a proto-sustainable socio-economic system can be found with very little waste and many regenerative systems, with the usage of earth and clay for the housing construction, and the usage of human manure in the agriculture. Most of the villages also have consistent social systems which allow them to consider community as a basis for common identity. As social change happens very quickly in the whole China, the project has also to deal with a changing environment in the villages. Above all the peri-urban settlements are strongly influenced by the forces of social change and the images of modern life. At the time of the writing of this paper, the field work is has been finished and the work on future scenarios has begun.

#### 3.1 Interdisciplinary communication

SUCCESS is an interdisciplinary, transdisciplinary and multicultural research project. Besides the combination of bottom up and top down approaches, the integration of the findings is the main innovative aspect of this project. One of the issues that has been emerging is that natural scientists and social scientists tend to look at the question of sustainability in very different, sometimes incommensurable ways. The researchers have been prone to make recommendations which have the potential of negating one another and compete with one another. Four modules - economy, ecology, socio culture and architecture each work separately and then attempt to synthesize a common knowledge about the village.

The output of the project consists of different scientific scenarios for the future development in the case study villages, having two main topics: to remain within the limits of nature and to achieve a higher life quality. The project is structured with phases of field work and phases of analyses as in other scientific projects. But the task to develop future scenarios of sustainable development affects the approach to doing the field work. The field work in the villages has been done during three periods by the researchers:: in September 2002 and in April and October 2003, when the teams of experts of 17 disciplines (communication sciences, political sciences, sinology, sustainability, ecology, climatology, ecology, geology, energy, economy, agro forestry, agriculture, sociology, land-use planning, architecture, media-sciences, participation) worked in the seven SUCCESS case study villages.

Integrated communication between the disciplines is the main innovative aspect of SUCCESS. The spatial dimension of the case study approach proves to be a primary condition for the transdisciplinary approach: the fieldwork is done in a one-week stay in each village where the emerging data knowledge is immediately exchanged among the disciplinary teams. Thereby, the social scientist enriches the knowledge of the water specialist, the architect enlivens the knowledge of the energy people, the agricultural scientist works together with the sustainability economist. This makes the work efficacious within the strict given budget lines; it gives new incentives for the methodology as it is a very new research situation , especially for the colleagues from natural sciences, collecting the data at a local level in a case study approach, is a very important scientific innovation. All researchers work in the selected village and start with their disciplinary approach, but share the data in a common process of discussion in the research group during the field study time.

Another communication system is the transdisciplinary one: the case-study approach supports the accessibility to the local knowledge, to settlement dwellers themselves. The close contact to the local population brings the high touch quality into the scientific approach, whereas the research itself is done with all the available high tech tools, including video cameras, internet-linkages and computer based systems analysis.

The transdisciplinary and interdisciplinary approach together are a chosen tools in China's rural areas where the available data are of very different reliability depending on the specific disciplines. By cross-checking the results between the different researchers, the group of researchers develop a common scientific knowledge. These results give an integrative scientific picture of case study village's systems characterized by the following qualities: integrated, spatially based, participatory, authentic, straight, pristine, unadulterated, intuitive, direct and cross-checked.

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<sup>1</sup> ICA4-CT-2002-10007, [www.china-eu-success.org](http://www.china-eu-success.org)

### The photo interview: an innovative method of social science in the SUCCESS project

We-(the authors) are working in the module of socio culture with the specific methodology of the photo interview (Harper 1987, Wuggenig 1990) to investigate the local life quality.

Selected persons in the village take photos of their view of their own home village and give an interview where they make a narrative about the topics which are photographed.

The basic assumption of our qualitative socio scientist approach is that each individual is constructing his or her own reality (Schütz 1981/1932) giving a meaning to each activity, – by choosing a photograph, the interviewee allows the expert to follow the way in which she or he has given meaning to a specific approach and has constructed his or her respective reality.

We make steps to find out the perception of life quality in the present and in the future following the research question “What to maintain - what to change” under the aspects of sustainability. The photo interview as an active participatory process in visual sociology, generating empirical data for the photo and text analyses (Oevermann 1993), is the basis for our interpretation that figures manifest as well as latent aspects. Our material is the outcome of photos taken by the dwellers, their interpretation of their own situation and the scientific hypothesis building process. In the SUCCESS project, we combine two qualitative approaches to a new set of methods that is specially welcome in the data situation in China; the empirical data of the photo and interview as well as the text analyses with objective hermeneutics(Oevermann 1979, p 352). We combine these empirical results with a theoretical interpretation, and this counter-checking guarantees a good path to authentic information.

## 4 PLACE AND SUSTAINABILITY

Working out seven case studies gives the local place in the village a specific meaning. What to change , what to maintain is located on a place in the village. So spatiality is the basic condition for our interdisciplinary research approach; it is also a condition for our definition of sustainability:

*“Sustainability is a local, informed, participatory balance-seeking process, operating within a Sustainable Area Budget, exporting no negative imbalances beyond its territory or into the future, thus opening the spaces of opportunity and possibility.”*

*-local: it happens at a specific place – the living environment of a settlement within its region, including living patterns and creativity of the tenants*

*-informed: it benefits from the tools of the global scientific community and requires an interdisciplinary approach which provides cause and effect feedback*

*-participatory: it needs informed, empowered, gender sensitive human actors who are the stakeholders in the sustainability negotiation process*

*-a balance-seeking process: it models alternative future scenarios, taking into account the classical triad of sustainability: economy, ecology, socioculture , complemented by the context of built environment*

*-spaces of possibilities : sustainability considers the future as an open space where socio cultural life quality, economic equity, and ecological needs converge towards balance*

*(definition slightly renewed after Dumreicher, Levine, Yanarella)<sup>2</sup>*

## 5 HIGH TOUCH, HIGH TECH AND SPACE: THE CHINESE VILLAGE

### 5.1 The inner information space: - the village my home

The main high touch in the Chinese rural area is the native village with its complex social system. The interview partners are aware of their being an active part of the village community as a whole, including communicative and interactive qualities of their village environment:

毕竟我生在这儿，长在这儿，怎么说，是自己的老家，再好，再不怎么样，也觉得挺好的，挺满意的。	After all, I live here and grow up here. How to say here is my own native home. No matter how good or how bad it is, I feel nice, I feel satisfied.
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Miss Wang Chong, paragraph village

With her description, Wang Chong gives an example of “integrated information digestion: she tells her integrative connection to her native village that does not depend on a detailed analysis of pro and contra, but is based on an overall feeling of a place where life is good for her. With the growing attraction of the urban environment, defining a future image for the village is crucial in order to maintain its liveability. Only if the village is an attraction for the young people will they stay there. In our interviews, we found out that the young people’s desire is to stay in their home village, but is also the strong hope that a modern way of living arrive in the settlement. The results of the SUCCESS project shows that people want to stay in the villages although the town, the place for modern urban life is very close to them and well known, mostly through the experience of the many working migrants. People described the wellbeing in the village as an integrated quality: one basic characteristic is the daily communication within the families, in the peer groups and between neighbours and friends. These communication networks have a specific quality of safety and trust

<sup>2</sup> Definition Dumreicher Heidi, Levine Richard S.,Yanarella Ernest J., (Oikodrom The Institute for Urban Sustainability, Vienna, Austria and Center for Sustainable Cities, Lexington, KY), 1998-2001

because the network has stood the test of time – from the day you are born these communications networks are working and showing people which part of the systems fits to a given situation. The relationships and the conviviality in the village is the social resource for the wellbeing and life quality in the village.

In our interviews the inner quality of the village is described in comparison with the “modernity” of the town. Right now, the outside world is not yet familiar enough to the dwellers of Beisuzha, but the more they migrate for earning money there, the more they will know that there is a choice to make. Wang Chong, the young woman who works in a factory in a nearby town, comes regularly back to the village. She sees the village in direct opposition to the outside world to which she migrates for work. The information structure within the village relies on two categories: on the family – and on the friends.

在外面就是没有亲戚，没有朋友，在一个陌生的地方，肯定不容易。	Outside, there are no relatives, there are no friends, and staying in a strange place, it is really not easy.
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Wang Chong, paragraph village

Communication in the village relies on two time systems: the chronos time and the kairos time. Chronos time means the ongoing daily activities that form the basic line of trust and networking; kairos times are outstanding events of short duration (Galtung 1997: 100).

The village people are aware of the double quality of these events. In San Yuan (Yunnan), villagers describe on the one hand the ongoing communication system in the day-to-day-village life, but also the yearly market in a nearby town: this market is an event where they go for selling and buying – but just as much for meetings friends, other members from their clan and relatives who have married out. They also go there for information exchange. Both communication systems together build the inner village information network. People who are migrating for work to the neighbouring towns come back to the village for important cultural community events:

也是过国庆节，现在在家也是秋收了。	I come back both for National Day and for harvest.
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Wang Chong, paragraph house

The cultural life fits in a daily life and village cycle. Harvest – the festival which comes out of the villages life and is part of the agricultural yearly cycle - stands next to the national day, imported from outside and representing the political structure.

Wang Chong doesn't say what kind of plant she is harvesting and she doesn't tell us, who will help harvesting. It is a thing without saying, a system of agricultural and familiar events, which do not need any explanation not even if she is in a discussion with foreigners.

High touch and sustainability: the trust that the village community is working well and will support the pathway into an uncertain, but imminent future is a possible basis for establishing a sustainability process in the villages. Based on this value, the modernisation process of sustainability can trust the existing integrity of the village in order to encourage an openness and curiosity to what social and other changes the future might bring about. In our research, we met this confidence in a coming future mostly in the villages with good governance whereas in villages with high social disparity and distrust in the local administration, people sowed no visions for the future and seem reluctant to proactive approaches.

## 5.2 Spaces of communication and interaction within the village

The communication and information flow within the village seems to be an abstract value, but in the high touch situation within the settlement, these information flows are supported by the spatial patterns. The role of these material artefacts - the house, the school, the road or the village square is changing, but their support for the integrity of the village is still very strong. The village as a built environment , especially the public space with its communicative quality is directly linked with it's emotional co-ownership (Dumreicher/Kolb: 2001).

In the photo interviews, the dwellers show us the places in the village that they consider of interest, selecting along their own intuition. In Beisuzha, the communication places selected by the local dwellers for their photograph were: the village street, the primary school, the village square, the green house. At the manifest level, these places in the village are the same for the older and younger generation, but at the latent level, their meaning is more sophisticated. All places have some common meaning for all generations: they stand for the integrity of the whole village and they all represent places of communication, the shops as well as the party-centre. We have no signs for high tech: this new topic had not yet reached Beisuzha until our visit.. In one other village, our partners gave us photos of the newly established telephone cables; in another village, the SUCCESS team established a direct link to the internet for the first time. In three villages, the SUCCESS project turns a participatory videofilm where the farmers, for the first time, have a chance to give an active contribution to the new media - they themselves learn in workshops how to use the video camera and how to proceed in editing a film.

The local younger people talk of modernisation in the village, which includes a proper road and a modern house for their families. For the old generation yingbi and party centre carry the idea of traditional China, for the young generation their own family house and the small shops are the outstanding symbols. Both generations have a sense for representative architecture and for aesthetics and show awareness of the architectural landmarks in the village. Also both generations think that the school is an important issue in the village.

The following table shows different connotations of places and the common meaning of the young and the older generations in the village of Beisuzha. The photo material shows that there are different places on the photos linked with specific social meanings. We found out that there are some common fields of interest for both generations, like the importance of education, and there are on the

other hand fields with different meanings like the Yinbi wall in front of the party centre, the role of the new shops in the street or the meaning of the new road.

Place in the village	connotation/ old generation	connotation/ young generation	common meaning
The school	The school is a symbol for the interest in the next generation: it was made by the common effort of the whole village-community to finance its rebuilding	The school is a place for the future: here, the children learn the Chinese Putongua which will enable them to communicate in the city	The school has an outstanding value for the village: it is the carrier of the future
The newly rebuilt road, the streets	Comfortable for pedestrian use, shows the modernity of the village  Important inside the village	The space for motorcycle, lorry, tractor. Symbol of a new mobility for leisure and work:  Link to the outside world	The rebuilding of streets and roads makes the village more attractive for both - the insiders and the outsiders at two levels: it is practical and symbolically important
Built environment on the street	The motive of the ying bi, the traditional Chinese wall, stands for continuity and value of traditional China	The small shops stand for the upcoming needs in modern life: timesaving and availability. they stand at the edge of tomorrow with their mix of monetary and non monetary economy	Both buildings show that the dwellers have a sense for representative architecture and aesthetics.
The landmarks map	The common party centre is the outstanding landmark in the village	Their own house is the most important place in the village	Societal issues need a place: buildings are stone built ideas.
Greenhouse as a working place	The eternal overload for the women is growing; lack of information especially for women	Women live an especially quick change in their professional biography, concerning profession and working place	awareness of gender issues

The table shows the places of interest that the dwellers of Beisuzha took photographs of. It shows the different symbolical meaning those places carry for the different generations.

## 6 THE SCHOOL AS COMMUNICATION PLACE FOR THE VILLAGE

Place one in the range of important places in Beisuzha is given to the school. This building is seen as an interface of communication systems: between the generations, between the donors (who gave money for building it) and the users- the children, between the countryside where the children live now) and the urban environment (where they think the children are going to live in the better future). The school is important now – because it shows that Beisuzha is a well-off village. It is important for tomorrow: only with good basic education will the children have a place in the future.

The social change that comes with the transformation era is one of the big challenges in the Chinese country side, and the need of education and the efforts to build and run a school is very important in every SUCCESS case study village. In Beisuzha both generations – old and young- were convinced that the school is the condition sine qua non for the access to a better life for the children. “*Only when they get a good education, can they have a future*”(filmmaker interview 1).

The school is the place where the community can make a common effort for the common future of their children. It is also an indicator for the wealth of the village, especially in the former times when the village was not as wealthy as today, remembers a party member:

“*Our village was very poor, the house of the school nearly broke down. “(Zhang Lan)*

When selecting an image relating to the school, the interview partners took a photo of the fashionable wall at the school courtyard that carries all the names of the supporters donating money for the modernisation and adaptation of the building for contemporary needs. This is not a special quality in Beisuzha – donating for schools and universities is a common ritual in China. Building such a wall is a culturally imbedded Chinese way of memorialising important events.



Beisuzha, Donators wall at the school. Photo by Wang Chong

The photo shows the yinbin, which is located at the entrance of the school building. The black board shows all the names of the donors. The villagers are proud of this social process and in order to memorialise it, they built this wall. The wall – as a building – reminds the villagers of this important narrative, the story of Beisuzha as a place worth investing in a common effort. For the whole village, the school is a place and a symbol of the social coherence of the community. People were ready to make quite an effort, as the party member remembers: “My whole year salary was input in it. One year making no money”(Zhang Lan).

## 7 A MEMORIAL FOR COMMUNICATION TOOL NUMBER ONE: THE LANGUAGE

China with its more than 1 Billion inhabitants has a communication systems that supports the integrity of the country: the common written language- Peking Chinese, sometimes in the West called mandarin, in Chinese terms Putonghua.

For the young generation, the school in Beisuzha carries this most important meaning: the school is the place for good education, it is also a basis for the future. Besides social and other competence, what the school offers in the first place is a tool for communication: learning Putonghua means learning the right Chinese language.

我上学校。我好长时间没回到学校看过了。 我拍照的时候，就是我走到学校，我看不见的这个。 我上学的时候，老师也不怎么样，也没写作， 我觉得这个变化挺大的。	I went to school and I haven't gone back to the school for a long time. When I made the photo, I went to the school and I saw this. When I learned in this school, the teacher was not so good, there was no such writing, I feel this change is very big.
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Wang Chong, paragraph. School

Wang Chong describes a yinbin wall in front of the school, which invites pupils to speak the right language, the putongha. She is aware of the advantages speaking putongha, because in the town where she is working people speak another dialect than in her home village; this is difficult for her in social as well as in professional terms.

If today's children can learn this language at an early age, it will give them a tool for their outside life, the outside world.,.

The school is a place where children prepare for this scope. What the village people do not see: by giving them the chance to make their own lives outside the village, the school also furnishes the basis for the upcoming braindrain from the village to the town, thereby promoting a process that helps the individual to have a better life quality, but which impoverishes the village in the long term. Discussing these long term perspectives is one of the topics in SUCCESS.

The awareness of high touch - the relation to the school, to the parents, to the “warm” atmosphere in the village as opposed to experiences in urban encounters - prove to be consistent. But the attraction of the urban field with its working place, its infrastructure and its higher children's education is so strong that people tend to go that way, and from a demographic point of view, these upcoming transformations of the agricultural sector seem inevitable.

The challenge is to maintain the social integrity of Beisuzha into the future and in a sustainable way. If this can be done, a scenario with a balanced dynamic between urban and rural environment becomes possible.

### Street and road as communication tools

The way that the new world chooses to come into the village is the street – a special place for village communication. People use this public space for many diverse communication activities: for business and selling like the shoemaker, the hairdresser, the massage specialist, for working on the harvest, for holding cattle, for selling hot noodle soup and for knitting, but also for leisure life, for

cooking and eating, chatting or playing games. These human activities get in the way of new activities - the street is also the place for the upcoming transport business: the cars, tricycles and lorries that enable material to come into the village and to leave the village.

Beyond the materiel flow, the road brings also new ideas and a symbolic connection with the world outside of the village. The arrival of the foreigner in the SUCCESS case study village was obviously made possible by the road, and the many cultural activities organised for our first day welcome ceremonies also were delivered by the road. As the traffic is very low in the Chinese villages, these public events, often occupying the whole public space in a village could be done without any traffic jams.

Our expert team has seen different stages of road development: muddy roads, small concrete roads, bigger roads, no roads at all. The building of new roads is under ongoing discussion among the dwellers of the SUCCESS case study villages. In every stage the villagers told us the wish to achieve the next higher standard. From mud and earth street to asphalt to concrete – from a small narrow footpath to a big town like boulevard. The road is a symbol for a better future, because it promises to connect the local people with the outside of the village. So the road develops as a communication link to the outside world: people transport goods and experiences inside and outside the village and take the wealth out of the village and back again.



Photo from Zhang Lan

The photo shows an asphalt road outside the village, to the side of the road there are trees and fields. Far away in the centre of the photo the observer can see four persons on the street. The biggest part of the photo shows the big dark nearly black surface: the asphalt. The photo interview gives an interpretation: on the road, there are four representatives of the village elite promenading on it – and by photographing them, our partner herself has a stake in this importance. There is a link between the new road and the better life at the edge of Beisuzha. The new roads have different meanings for different generations in the village: for the old generation, it is a sort of fashionable boulevard where walking on foot is easy. It is also a way of getting rid of one of the attributes of poverty: the dust. The interviewee sees its importance mostly inside the village.

*“Before the road was built, transport was difficult and walking was difficult”.* (Film maker 6)

For the young generation, the new road is a symbol of prosperity and the basic condition for the prosperous future of the new small shops that are emerging along the main street. It is the carrier of the new emerging mobility, the place for the motorcycles, the trucks. The newly built road to the village as well as the newly built main street have a high value to the village. The young and the old generation find this fact very important: it makes Beisuzha more attractive. It is good for the village life, and it calls for respect from other villages who have not yet managed to finance their own new streets and roads.

### The Green house: Information and professional activities

In times of rapid change it is not easy to get new information about agricultural production to develop the farming economy. In Beisuzha we found out the following situation: Wong Chong is interested in her village, and would even like to live here. But it seems that for this young woman it is easier to find a working place in the city 300km away, than to get information about high outcome farming. Other villagers are aware of this situation; the village has invested a lot of labour in the last few years and has had unrewarding results for their effort: *“People who cannot read or write cannot deal with pesticides or with the green houses”* (Film maker 6). Zhang Lan who is part of the local elite knows that the solution for this situation lies in organising education for the other village dwellers:

帮助他们，给他们一些信息，年年种大棚，或者棚菜得了病了，或者来了什么新品种了，给他们点信息。

I will help them, give some good information to the young women. Every year they work for green house. And they have some problems with green house farming, for example the vegetable growing not well or there is some information on new products. Give them some information.

Zhang Lan, paragraph women

A long term sustainability policy helps to overcome the existing bad experiences, insecurity and doubts with new technologies. This also prevents the outlook that old knowledge gets lost – like the traditional common work that is still the rule in many Chinese

villages, but not in Beisuzha: “*We all do farm work, but everyone does his own fields. People don't work together*” (Filmmaker 4) In this way innovative people like Wang Chong finds a satisfying working environment within the village. In this way they ensure the integrity of the village in two ways: finding modernity and new working places which generates new income.

Zhang Lan sees that some modernisation has come into her settlement, by using “fertiliser”: the traditional way of doing agriculture is not “good enough” anymore.

就象现在种地,有的不像样的玩意, 总得跟上形势。	上粪不行,	Such as farming, there are too many (old fashioned) ways that are not good. Using dung is not effective, we should better catch up the modern ways
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Zhang Lan, paragraph traditional thinking

„Just like Mao said: we need animals, services, agriculture, factories. Just being a maize farmer is not enough, we need new ideas.“(Film maker interview 3)

Agriculture is a constant topic in the village Beisuzha: the method of drying maize on the public streets and squares, working in common and in public on the harvest, or going daily to the fields. The green house represents the new way of doing agriculture with all its contradictory implications: Farmers are officially encouraged to further employ greenhouse methods.. Some farmers work in the green houses of the nearby “high tech zone”, others have their own green houses in the settlement. The farmers see the greenhouse as something which comes from outside. The greenhouse is mainly a working place for women and an occasion for gender discussion in the village. The interview partners describe the growing overload of the women and also women's quick change of the working place. The statements show clearly that there is a serious tendency towards growing social and economic gender disparity. The green houses are the concrete battlefields of the emerging problems. When developing new strategies for the agriculture, the gender topic will be of growing importance. Only when both, the technical and social questions are taken into consideration can the greenhouses become attractive working places for young people. The interviews show that the farmers have a will to try out new technologies like the green house; only when their courage fails are they forced to give up and to look for other opportunities, mostly in the city.

前两年有，现在没有了。这温室大棚，时间长了 ，土地里细菌挺多的，种别的蔬菜，长的效果就 没有以前好，现在拆了。	We had a green house two years ago, but now we don't. In the green house, after planting some vegetable for a long time, the soil became full of some bacteria. If we grow other kind of vegetable, they can not grow as well as before. Now we removed it (the greenhouse) away.
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Wang Chong, paragraph greenhouse

In sustainability thinking diversification in agriculture is a need for a sustainable future, but this can only work if the farmers get the necessary information on appropriate technologies. In the case of Wang Chong's greenhouse, it was easier for the family to give up the greenhouse than to look for appropriate set of methods of cultivation, combining the traditional and the contemporary approaches. This is not out of a lack of interest for agriculture – on the contrary, the young woman tells us that she came back home from the city at harvesting time to help her parents, but lack of information.

## 7.1 The outer circle: village, region, province, country

Beside the inner communication circle where the Chinese villages have great independence there is an outside one: the national and provincial policies. This top-down-approach influences the farmers in their decisions about what to plant and how to grow. At our visit in 2002, we were told that it was the officials who suggested the present green house – wave. The dwellers keenly observe outside activities like road building, electricity, biogas and other infrastructure input that potentiates a growing economy. For the village the information from the outer cycle is hard to integrate. The outside information is not available in the village, only the consequences. So it is easier for the farmers to keep their daily know how without making relevant changes. But the information is increasingly coming further into the villages.

## 8 SUSTAINABILITY AS AN INFORMED PROCESS: HIGH TOUCH AND HIGH TECH IN THE CHINESE VILLAGE

The concrete highway and the data highway reach the Chinese village at the same time, namely: now. Suppose the money becomes available.

为什么三元村以前没有程控电话及闭路电视.	Expert: Why didn't San Yuan have telephone and TV before?
因为没有钱, 现在政府为村民修了水泥	Villager: Because there was no money. Now the government has cemented our roads and set up television and telephone cables.

San Yuan, interview doctor, Oct 2003

The high-touch-situation in the Chinese villages is a traditional quality developed over thousands of years, the high tech comes in the seven SUCCESS-villages only in the recent years. Nearly every household has a radio or television: often of poor quality, often in black and white, but the villages have a stable connection to the outside world. There are many regional TV stations in the rather small towns; most bigger universities have their own TV-team and programmes. The SUCCESS team managed to make numerous presentations in these local and regional TV-programmes, and influences the high tech situation in the villages with the existing project.

All villages also have the old public radio: it consists of a microphone, mostly situated in the party centre, and used for all sorts of public announcements – like, for instance, the arrival of the SUCCESS team that was communicated over loudspeakers to the whole village. Also here the SUCCESS project affects the work of the public radio with a new topic.

The telephone is still a rare technology, but even small villages in remote places have at least one public telephone operated by some shop keeper or by the health station. A private telephone in private houses is still a very rare artefact of luxury.

村民有了电话就很方便, 有了电视就了解很多信息

Villager: If the villagers have a telephone, this is very convenient, if there is television, they get a lot of information.

San Yuan, interview doctor, Oct 2003

The team of SUCCESS often ended up to be a valuable carrier of outside information, and high tech in the SUCCESS villages was mainly represented by the researchers and their instruments: The teams come with their computers with their film cameras, with their photo equipment, with their high tech presentation tools.

The participatory video effected in three of the villages gave the farmers the first possibility and experience with such a tool, enabling them to create their own village film that is immediately available on CD for all the dwellers.

## 9 THE RIGHT OF ACCESS TO INFORMATION

In a process of modernisation, from a western point of view information plays a crucial role. Availability and non availability of information is at stake when discussing winners and losers in the digital age – in the western neo-liberal situation as well as in the era of transformation in China. In all case study villages there are different issues where people signalised need for more information on different levels. The lack of transparency is obvious to many of our interviewees, even at the village level. Sometimes the whole village is not informed about their future development and the governmental plans concerning their region.

In specific issues we could observe that specific problems are solved by showing how to handle the daily life but not to give background information: The available knowledge at village level relays mainly on high touch communication: the village common knowledge base relies mainly on oral communication – an historic know how. In the Chinese tradition, the village has a reliable independence on organising itself without much contact to the outside world. This situation undergoes dramatic changes right now, but we can still study this traditional pattern: cases where the outside knowledge is needed and - hopefully – available is for instance the water supply.: when Xia Futou has not enough water for the daily supply of the households and fields, people trust that the village leader knows the telephone number where he must deposit the need for water; the dwellers trust that the problem will be solved and the water will flow again. This situation changes today: outside influences become more stringent in the era of modernisation, high tech is coming at the country and regional level – and the sovereignty of the village is at stake. In the recent case of drought where the lake of Xia Futou has been dried out, the village available knowledge is not enough anymore.

The access to the global information networks can come about when high tech enters the village – but it needs an effort to do so, the digital revolution has an ability to decentralise activities, but according to recent studies, the world's digital communities, though geographically divided, share some common trends that can be found in the US as well as in China: the centres of Internet production and consumption are found in the existing large metropolitan areas. The perception that the internet contributes to the collapse of spatial and temporal boundaries, is in sharp contrast with the fact that they display a strong tendency towards spatial agglomeration. In August 2001, China already counted for 5.2 percent of Internet users in the world ; but they are concentrated in Beijing, Shanghai and Guangdong – thereby sharing the trend in the US where San Francisco, New York and Los Angeles are leading for Internet content in terms of both absolute size and degree of specialisation (Loo 2003). The internet by itself, thereby, contributes to enlarging the gap between urban and rural regions. Starting a different pathway is a challenge for studies like SUCCESS that tend to develop future images where the rural region can gain, not lose importance in the upcoming sustainability scenario.

## CONCLUSION: WHAT TO MAINTAIN- WHAT TO CHANGE? THE CHALLENGE OF SUSTAINABILITY

The team of the SUCCESS researchers represents the high tech knowledge of modern science which leads to the development of sustainable future scenarios. When speaking about establishing a sustainability process in the village, this new concept is well received by our rural partners because it carries the symbols of the new information era: by high tech – from contemporaneous energy saving tools to mind map software for generating sociocultural results and presenting a film in the village square which also was produced with high tech instruments. The combination of high touch and high tech is a possible way to support the potential for a sustainable modernisation era.

Global and local village in one the **glocal village**.

Interviews made on the spot in the seven villages in the frame of the SUCCESS study in 2002 and 2003:

- Photo interviews/ local experts referring to their personal photos (Interviews by Heidi Dumreicher and/or Bettina Kolb):
- Wang Chong, village Beisuzha, province Hebei: female, 20 years, parents: farmers, profession: factory worker.
- Zhang Lan, village Beisuzha, province Hebei: female, 55 years, parents: military, profession: teacher.
- Old Man, village Xia Futou, province Henan: 86 years, former village leader
- Male doctor, village San Yuan, province Yünnan: 40 years, holder of a shop and a small health station
- Additional data: Film-maker interviews made by Ina Ivanceanu, Nr. 1 – 6 (WP participatory filmmaking), village Beisuzha, province Hebei
- Interview with Burghart Schmidt, philosopher, made by Heidi Dumreicher and Bettina Kolb, Vienna 10.1.2004

- All interviews are led in the original language of the interview partner (Chinese, Naxi, English, German) and than translated, on the spot as well as literally. The names of the village dwellers are changed to guarantee anonymity.
- Review of the English version of this article: Richard S. Levine

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