

# UN HABITAT

FOR A BETTER URBAN FUTURE



## 1. Name of practice

### Sustainable Urban Development in Kunming

The city of Kunming set up a Master Plan focused on sustainable urban transport and development with the cooperation the Swiss federal government, the Development and Cooperation Agency, the city of Zurich, the ORL Institute at the Swiss Federal Institute of Technology, and the Chinese central government. The Plan involves a diverse range of measures and is intended to act as a Chinese showcase which can be implemented in other Chinese cities.

## 2. Location(s)

Kunming, China

## 3. Actors.

- Chinese central government
- Swiss Development and Cooperation Agency,
- City of Zurich,
- ORL Institute at the Swiss Federal Institute of Technology

#### **4. Issues addressed/ focus**

The Master Plan goals are to:

- Plan residential areas so as to limit traffic demand
- Promote cycling and walking
- Develop an efficient, affordable public transportation system that has priority on the road network
- Develop parking and traffic management programs to limit traffic congestion
- Determine best practice solutions that can be applied to other Chinese cities

#### **5. Stage of implementation**

Implemented since 1993.

#### **6. Background**

China's industrialisation mainly occurs at the expense of the environment, especially in urban areas. Kunming, the "city of eternal spring", is situated in the south of China and is the capital city of Yunnan Province. It has an urban population of approximately 1.5 million in an area of 110km<sup>2</sup>. Like most metropolitan areas of China, since 1994 it has experienced significant migration from rural areas. The population rose to 3.2 million in 2009. This population growth has led to an intensification of traffic problems and the need for new solutions. In 1982 a partnership between Kunming and Zurich was formed to address water supply and drainage issues. The connection based on this partnership was developed further until 1993 when the Kunming Urban Development Master Plan was set up to protect the environment and set a path for future avoidance of environmental damage.

#### **7. What was/ is being done?**

A total of 40 measures were presented to Kunming's municipalities to achieve the above goals. These measures related to urban management, public transport, and the environment. The Master Plan appointed direct roads to spread outwards in a finger-shaped pattern in response to housing development. The gaps in between the fingers are used as green areas. New sub-towns were introduced to create a dense, mixed-use structure to encourage walking and cycling trips close to home, supported by a special pedestrian zone. Train lines to the centre along the sub-towns encouraged transit use. The historical old town of Kunming was designated a protected area and a historic city preservation office was established in 2000. The Master Plan introduced a bus-based public transport system and a bus-only lane was implemented in 1999 (the first dedicated bus lane in China). Besides bus transportation, Kunming supported the construction of high speed railways. By 2015 a high speed passenger line connecting Kunming and Shanghai will be completed.

In addition to these hard measures, Chinese experts visited European cities and attended seminars and discussions to learn about Western tramways and effective cycling and pedestrian infrastructure, with a special focus on sustainability. A combination of Swiss and Chinese experts guaranteed a high rate of integration within the project. Achieving an urban development plan

based on economical, ecological and social values - a novelty in Chinese urban planning - turned out to be one of the main challenges.

Kunming's rapid growth in the traffic sector (e.g. between 2000 and 2004 the annual mean growth rate of Kunming's bus passenger transport volume was 11.5%) makes a sustainable grown urban planning philosophy difficult to implement.

Today, urban planning in Kunming is based on three-year programmes. A mission report was published in January 2010 and an evaluation report is to be prepared for future plans. The highest priority is given to the connection of the south and north railway station, the accessibility of the airport by metro, and urban planning focused on 'transit oriented development'.

## **8. Outcomes and impacts**

The partnership was successful in bringing new ideas to Kunming. It is an excellent showcase of the possible synergies which can arise from cooperation between industrialised and transition countries. In particular it is a great opportunity to avoid the mistakes made by developing countries in planned urban mobility in former times. There is also a chance for urban planners from developed countries to learn from mobility in a localised manner. Professional partnerships grew between the Chinese and Swiss experts. An important consideration is getting to know the local culture and understanding which strategies will translate well and which will not. Thus the project contributed to international understanding and supported the development of intergovernmental relations.

## **9. Sustainability**

The Chinese central government is still in charge of the project. This means that planned urban development could be abolished at any time.

## **10. Replicability**

Since the Swiss Government was a central partner, financial reproducibility is limited as in all international cooperation projects. However, since Urban Master plans are still being produced in one way or another all around the world, the principles can and are being reproduced anywhere and anytime.

## **11. Documentation**

- Städtepartnerschaft Kunming-Zürich
- Kunming Mission Report: Stadtplanung und Verkehr

Downloadable under:

[http://www.eltis.org/docs/studies/Missionsbericht\\_Stadtplanung%20und%20Verkehr\\_Dezember%202009.pdf](http://www.eltis.org/docs/studies/Missionsbericht_Stadtplanung%20und%20Verkehr_Dezember%202009.pdf)

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Image source: Eberhard, Scheidegger, Thomas "Kunming Mission Report: Stadtplanung und Verkehr", 22.01.2010

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