

Presented at the FIG Working Week 2019,
April 22-26, 2019 in Hanoi, Vietnam



FIG WORKING WEEK 2019

Hanoi, Vietnam 22 - 26 April 2019

Geospatial information for a smarter life and environmental resilience



International
Federation of
Surveyors



Vietnam Association
of Geodesy, Cartography
and Remote Sensing (VAGRS)

Roadmap to a coordinated masterplan: Rural revitalization in Sichuan province in China

Dr.-Ing. Fahria MASUM, Land Management Consultant

Dipl.-Ing. Karl SPINDLER, Planning Office Spindler

Dr.-Ing. Michael KLAUS, Hanns-Seidel-Foundation

China's Rural Revitalization strategy

In recent 40 years, China's rapid economic growth and urban biased development has caused a huge rural-urban migration and emergence of hollow villages characterised by:

- the declining and aging populations,
- limited economic and social opportunities for residents,
- and depleting natural resources.

With an ultimate aim of speeding up the modernization in rural areas, rural revitalization strategy was adopted during the 19th National Congress of the Communist Party of China on 18 October 2017.



The strategy of “Rural Revitalization” is a major strategy for solving the “three rural issues” - to modernize agriculture, improve farmers’ socio-economic situation, and develop basic infrastructure in rural areas.

Rural revitalization strategy in China will consider key issues like

- territorial development balancing rural areas with intermediate cities and urban areas,
- infrastructure and connectivity,
- employment and livelihoods,
- environmental sustainability,
- rural public and social services

Methodology

This study is qualitative and draws the lessons from the experience of the participatory approach to rural revitalization with a particular focus on landscape planning and ecological assessment.

This study is based on a pilot project undertaken in Baoping, Ylong county and Jinyuan, Xichong county in Nanchong in Sichuan Province in P.R. China, undertaken during 2017/2019 by the Hanns Seidel Foundation (HSS), being facilitated by the Sichuan Department of the Ministry of Natural Resources.



Roadmap Step 1 Conventions and strategic targets

Regulate administrative responsibilities and compulsoriness

Regulate coordination of one head for several government agencies

Fix Strategic targets:

- 1、 Organization of the project
- 2、 System of operation
- 3、 Financing and funding
- 4、 Public participation
- 5、 Speed and Quality
- 6、 Mode of Fostering



Ceremony of signing an agreement among the project partners in Nanchong 2017

- 7、 Advanced, flexible way of thinking
 - multiple time stages and scenarios
- 8、 Sustainability and economy
- 9、 Advanced working methods, content and technology
 - citizen participation, ecological landscape planning,
 - vitality check, 3-D scanning,
- 10、 Human being in the center

Roadmap Step 2 Fundamental questions

Human being in the center:

What are core challenges about human beings?

- Only 14% people still living here
- Aging of the left back population
- Working generation has gone
- Disrupted families, leftback kids
- Poor education level of remainers
- 30% of the cropland is abandoned



Roadmap Step 2 Fundamental questions

Discuss and try to clarify fundamental questions

- For which population revitalisation will be planned?
- For new farmers, investors, the return of the working „middle“ generation?
- What are the needs of the elderly and leftback kids?
- How can the younger ones be held back in the countryside?
- What kind of proper infrastructure is required for whom?



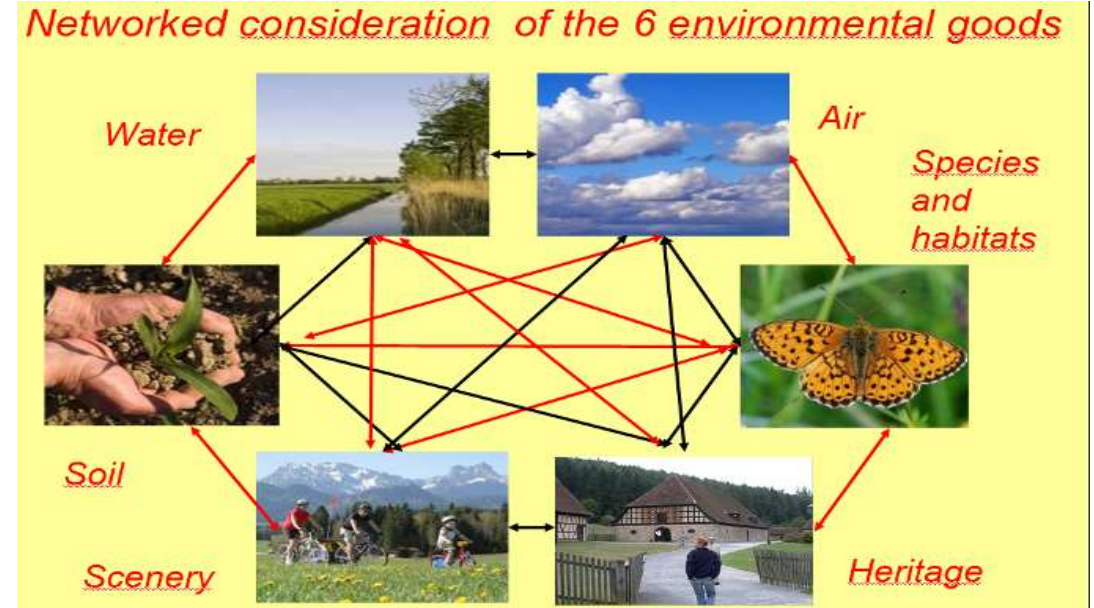
Roadmap Step 3 Information and capacity building



- Academic Summer school with Renmin University of China, Beijing July 2017
Chengdu July 2018

- Training week for local officials
Nanchong in August 2017

- Local field excursions with discussion of ecological issues



德国土地整理经验—生态景观学的引入

是研究在一个相当大的区域内，由许多不同生态系统所组成的整体（即景观）的空间结构、相互作用、协调功能及动态变化的一门生态学新分支。

一、生态景观规划六大要素

特色景观 历史文化 水系 空气 土壤 生物

二、生态景观规划方法



三、生态景观评级

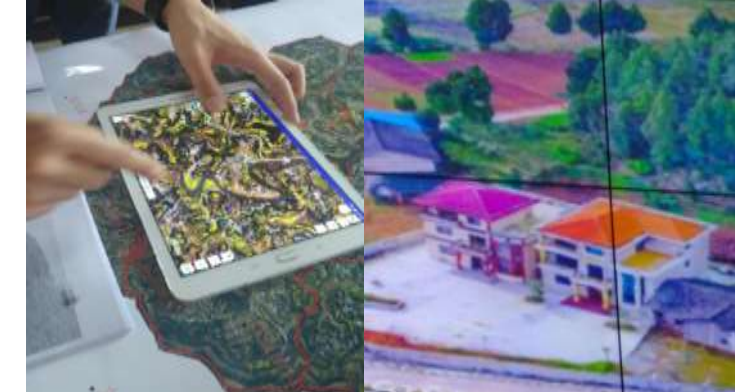
- 第I级 (1-5分)** 抛荒农田，并且周围尚有村民生活，存在复垦利用的土地
- 第II级 (6-10分)** 主要为穿插在农田当中的生态景观，有人为干扰的水系、竹林，生长在新垦上的植被、被地上的树林等。
- 第III级 (11-15)** 要为人干扰的水系，完整的竹林，基本没有人活动的区域，如自然植被茂盛无人干扰的湿地。

六个方面对生态环境进行打分评级，确定其生态保护价值，评分越高，其生态涵养功能、景观价值越高，予以保护。提升地区生态环境质量，景观观赏性。

Roadmap Step 4 Inventory and evaluation

Advanced inventory of the area :

- Evaluation of demographic and geographical statistics
- Survey of all kind of infrastructure
- Survey of Settlement
- Landscape inventory and ecological analysis:
 - mapping and evaluating typical landscape structures
 - evaluation ecological functions
 - Survey of Landscape ecology, mapping in a GIS database
- Civil participation
 - interviewing local citizens to their needs and wishes
 - documentation in da GIS database



Roadmap Step 5 Networked fields of action

01 Agriculture and stockbreeding

- Future of agriculture, future of farmers?
- How to treat favorable /unfavorable production conditions
- Land consolidation, reuse of abandoned land, new investors

02 Road infrastructure and traffic

- To develop a proper transportation system as basic infrastructure
- Quality standards for street spaces in villages and country roads
- public transport, consider weaker road users

03 Settlement and Village renewal

- how consolidate scattered settlement, develop villages
- Indicators for evaluation: Structure, style, standard,
- village renewal, cultural heritage , village community, village infrastructure



Roadmap Step 5 Networked fields of action

04 Social issue, education, culture, health

- Social facilities for all generations, health service
- Educational and vocational facilities and offers for locals
- Save, maintain and develop local culture



05 Landscape and ecology

- How to protect and develop ecological landscape
- Ecological infrastructure to protect rivers, natural resources
- How to maintain the character and spirit of the landscape



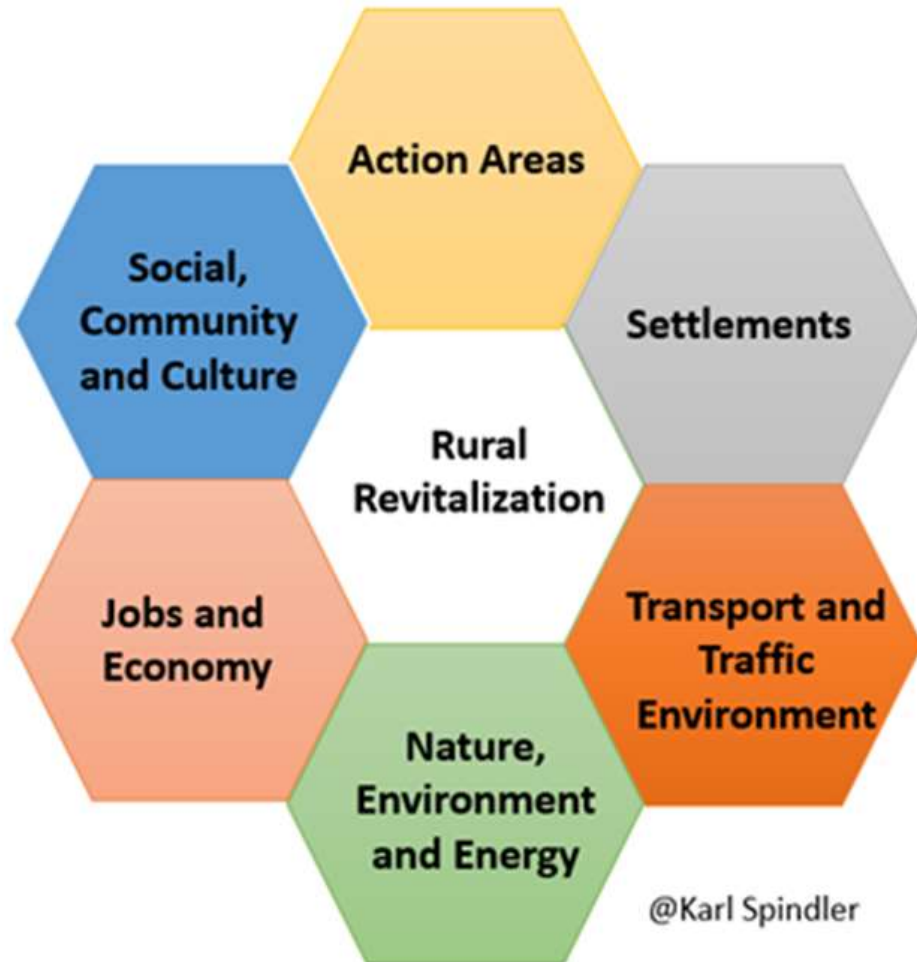
06 Tourism

- What are the endogen chances?
- Local benefits, sustainable agro – tourism
- how to employ all – over the year - tourism



Roadmap Step 5 Networked fields of action

The inter – disciplinary approach
in Rural revitalization



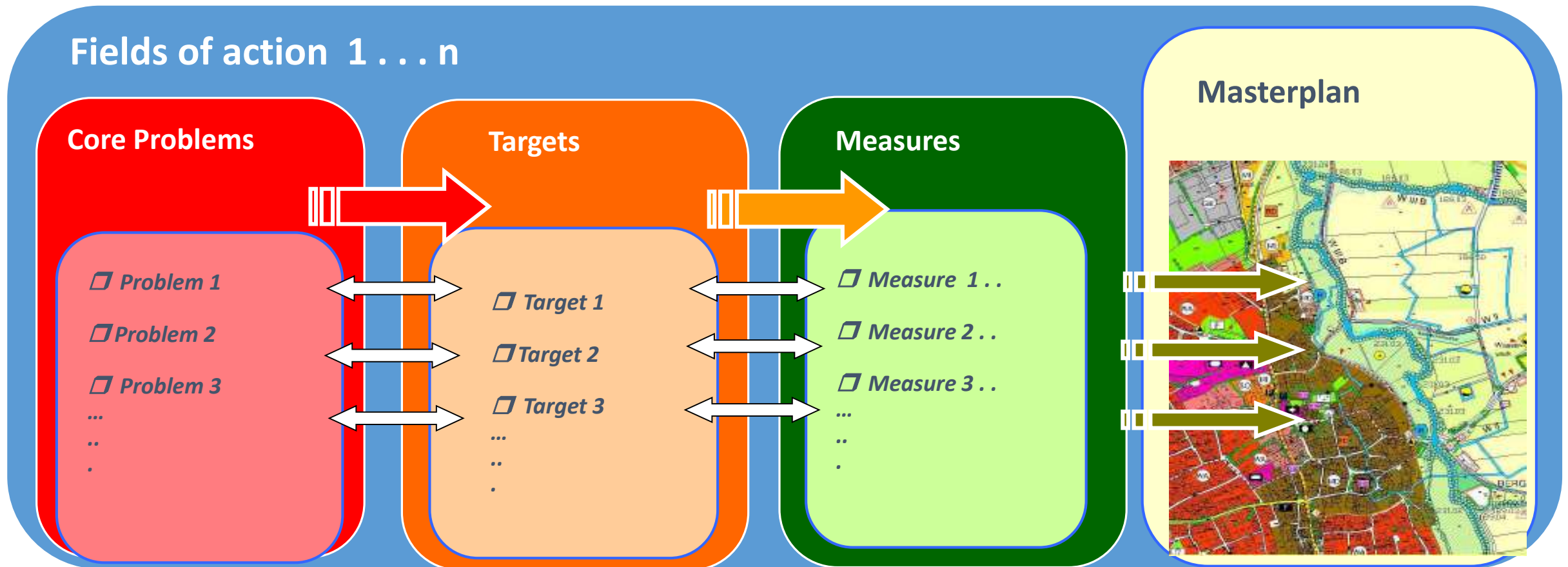
Most crucial: To strengthen home economy, create rural jobs



*„Where my home is ,
is no work,
Where the work is,
is not my home“*

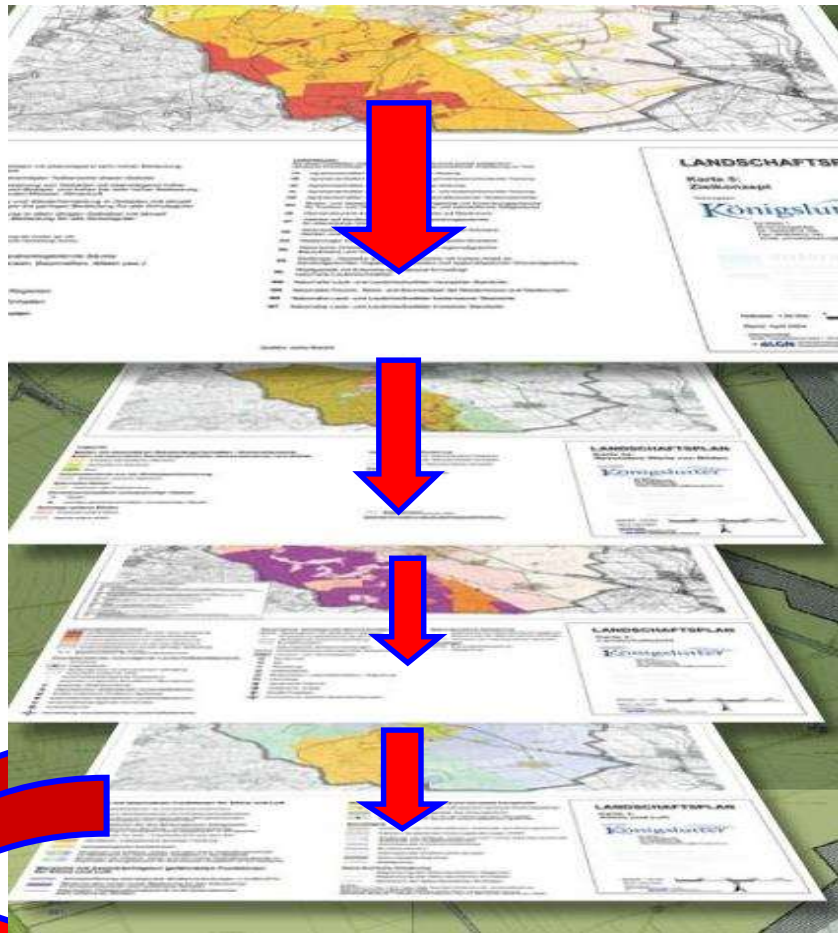
Roadmap Step 6 + 7 + 8 Core problems -> targets, measures

Analyze core problems, formulate targets and measures for the Masterplan



Roadmap Step 6 + 7 + 8 Core problems -> targets, measures

Stack the layers of sectoral planning to check compatibility



- Agricultural concept
- Road and traffic concept
- Settlement / Village renewal concept
- Social infrastructure
- Ecological infrastructure
- Non agricultural economy
- Landscape ecology concept
- Tourism concept



Find out compatibility or conflicts!



readjust conflicts !!

Roadmap Step 9 + 10

Finalization and Implementation of the Masterplan

- ✓ Make the necessary official decisions to set the masterplan a binding guideline
- ✓ Set measures according to priority and time sequence
- ✓ Prepare development options
- ✓ Prepare private / public funding
- ✓ Prepare private / public funding
- ✓ Keep public transparency: continue civil participation



Conclusions and Recommendations

- The HSS pilot project explored new modes of landscape planning for rural revitalization and mobilized the rural people to develop themselves and their communities.
- It provided experience and guidelines for the implementation of future projects related to China's new rural revitalization policy.

Based on the lessons learned from the pilot project, the study suggests the following:

- Investing in social, technical and ecological infrastructure;
- Strengthening self-responsibilities of communities and villagers;
- Creating innovative job opportunities in rural areas;
- Considering environmental sustainability in long-term strategic planning and policies;
- Promoting education and social infrastructure as key qualities of life; and
- Encouraging capacity development and citizen participation in the planning process.



FIG WORKING WEEK 2019

Hanoi, Vietnam 22 - 26 April 2019

Geospatial information for a smarter life and environmental resilience



International
Federation of
Surveyors



Vietnam Association
of Geodesy, Cartography
and Remote Sensing (VAGRS)



Thank You

Dr.-Ing. Fahria MASUM, Land Management Consultant

Dipl.-Ing. Karl SPINDLER, Planning Office Spindler

Dr.-Ing. Michael KLAUS, Hanns-Seidel-Foundation