Innovation of Agro-Technique Extension System by Using 3G Information Platform

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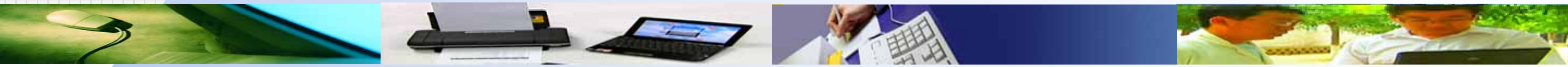
March 16, 2012, Beijing

Content



1. Background and Problems
2. Project Objective
3. Project Contents
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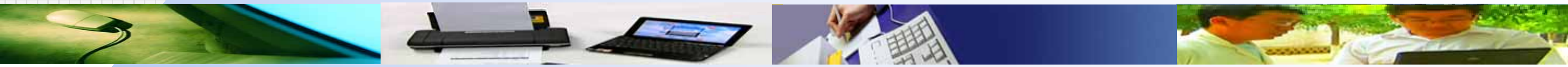
5. Application Demonstration
6. Project Achivements

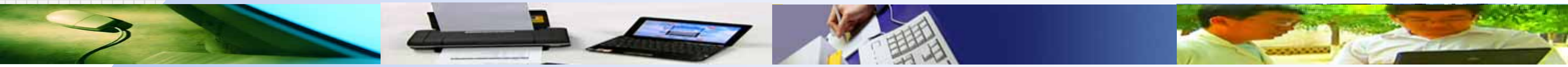
1.Background and Problems



Background

The fundamental way of ensuring national food security for a large population with insufficient arable land is to transform technology into real productivity and the key issue is to innovate agro-technique extension system. Now in China ,there is an agro-technique extension team with over 700,000 people covering various fields of agriculture. They have brought science and technology to farmers and have made outstanding contributions to developing modern agriculture, enriching farmers and building a new countryside. However, It shows that the public service capacity for agro-technique extension is still weak.

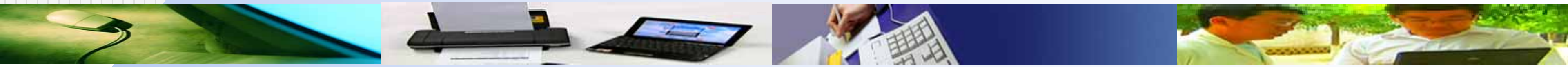
1.Background and Problems

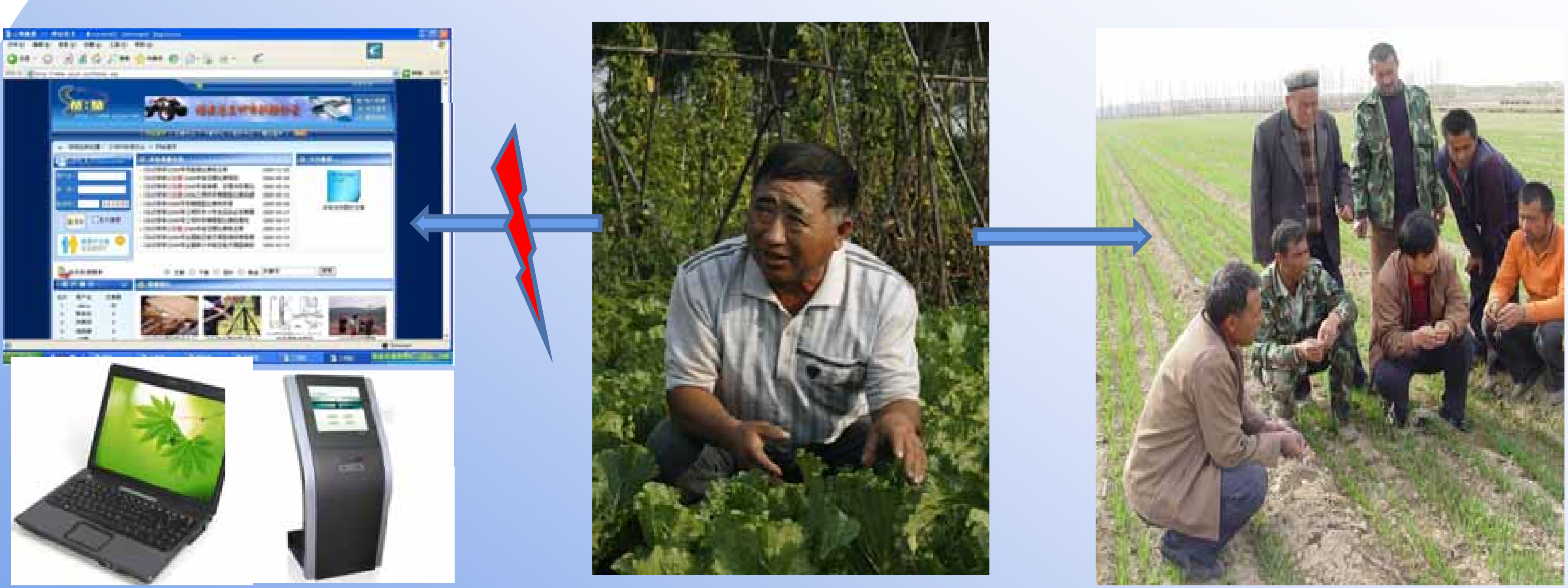


Background

The emergence of Internet of things, cloud computing and 3G represents the revolution in information technology era. The new generation of IT has the technical advantages of ubiquitous, wireless and broadband transmission. By these new technologies, modes of servicing, managing, training and information collecting in agro-technique extension can be innovated.

1.Background and Problems

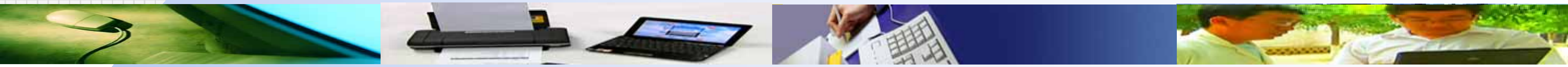




Farmers need to get information and solve problems in their farmland.

Farmers need “face to face, hand by hand, local speech” demonstration by technicians or their neighbors.

1.Background and Problems

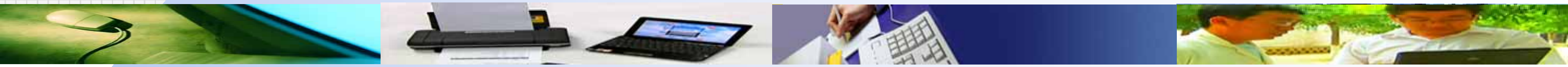


Focus

"Last Mile" of Agricultural Knowledge Translation/Tech Transfer

Agro-Technique Extension Worker

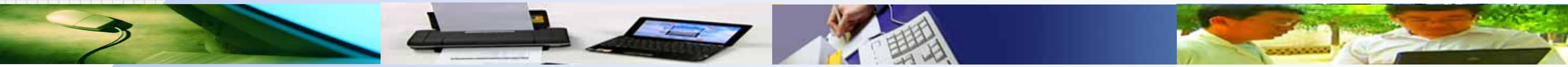
1.Background and Problems



Problems

Firstly, the means and methods of agro-technique extension need urgent innovation to change the traditional model of "Two Legs and One Mouth".

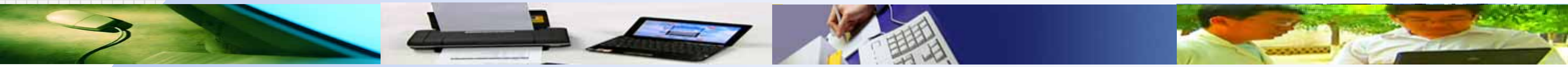
1.Background and Problems



Problems

Secondly, the methods of managing agro-technique extension need improvement to optimize the performance evaluation of staffs in agro-technique extension.

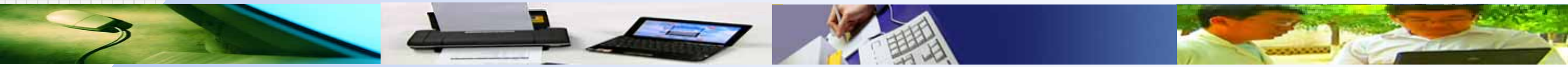
1.Background and Problems



Problems

Thirdly, the quality and capacity of staffs require immediate improvement to update their unitary and stale knowledge .

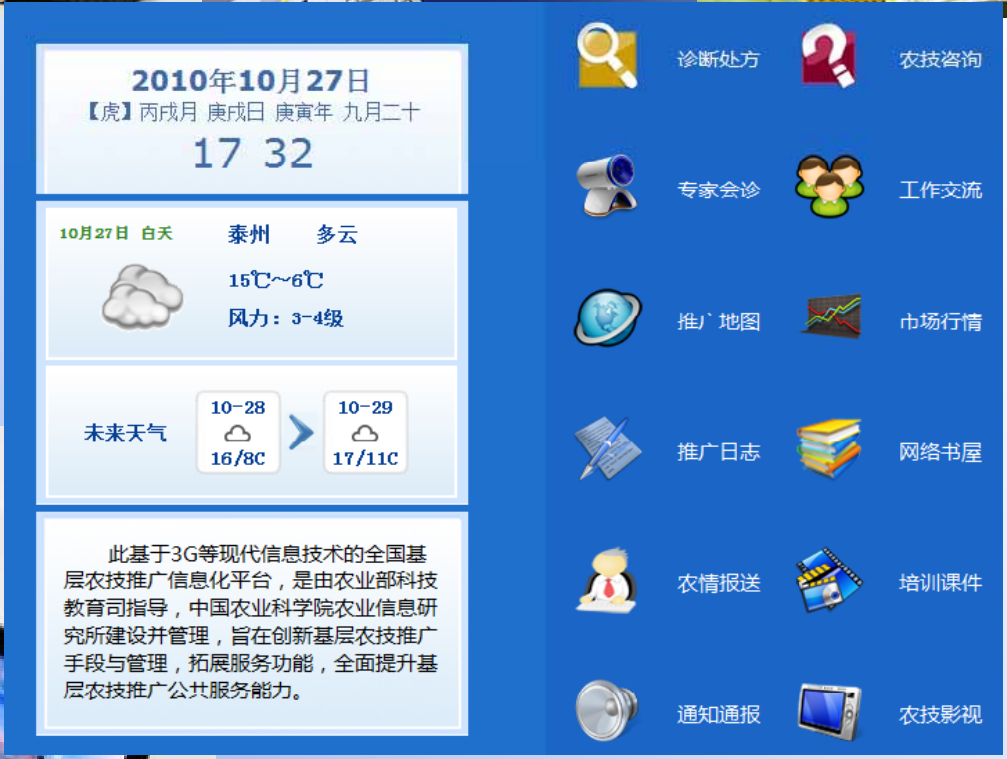
2.Project Objective



3G information platform used for agro-technique extension has been developed with the functions of agro-technique consulting, expert consulting, marketing, agricultural information alerting, training, work management etc. Carrying 3G wireless portable computers connected with platform, agro-technique extension staff can effectively solve the problems encountered by farmers. At the same time, fast collection of agricultural information and timely control of emergencies play an important role in protecting food security.

3.Project Contents

Information Platform



2010年10月27日
【虎】丙戌月 庚戌日 庚寅年 九月二十
17 32

10月27日 白天 泰州 多云
15℃~6℃
风力：3-4级

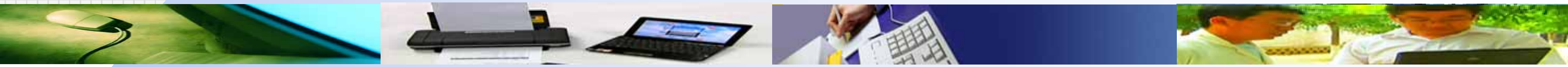
未来天气 10-28 16/8C 10-29 17/11C

此基于3G等现代信息技术的全国基层农技推广信息化平台，是由农业部科技教育司指导，中国农业科学院农业信息研究所建设并管理，旨在创新基层农技推广手段与管理，拓展服务功能，全面提升基层农技推广公共服务能力。

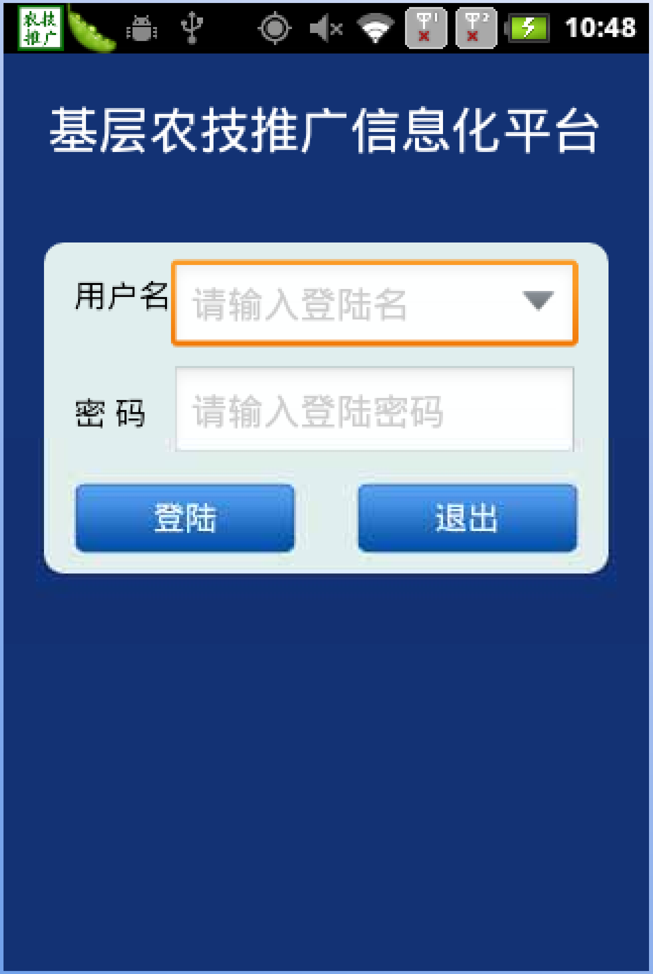
诊断处方
农技咨询
专家会诊
工作交流
推广地图
市场行情
推广日志
网络书屋
农情报送
培训课件
通知通报
农技影视

3G Wireless Internet Access
Portable Computers and Printers

3.Project Contents

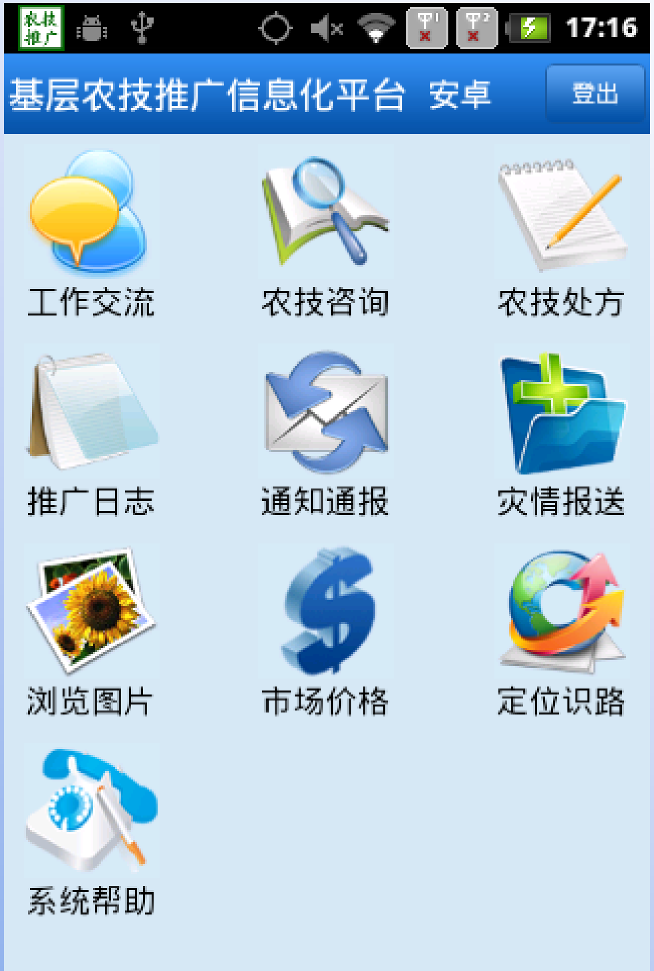


3G Mobile Phone



基层农技推广信息化平台

10:48
用户名
请输入登陆名
密 码
请输入登陆密码
登陆
退出

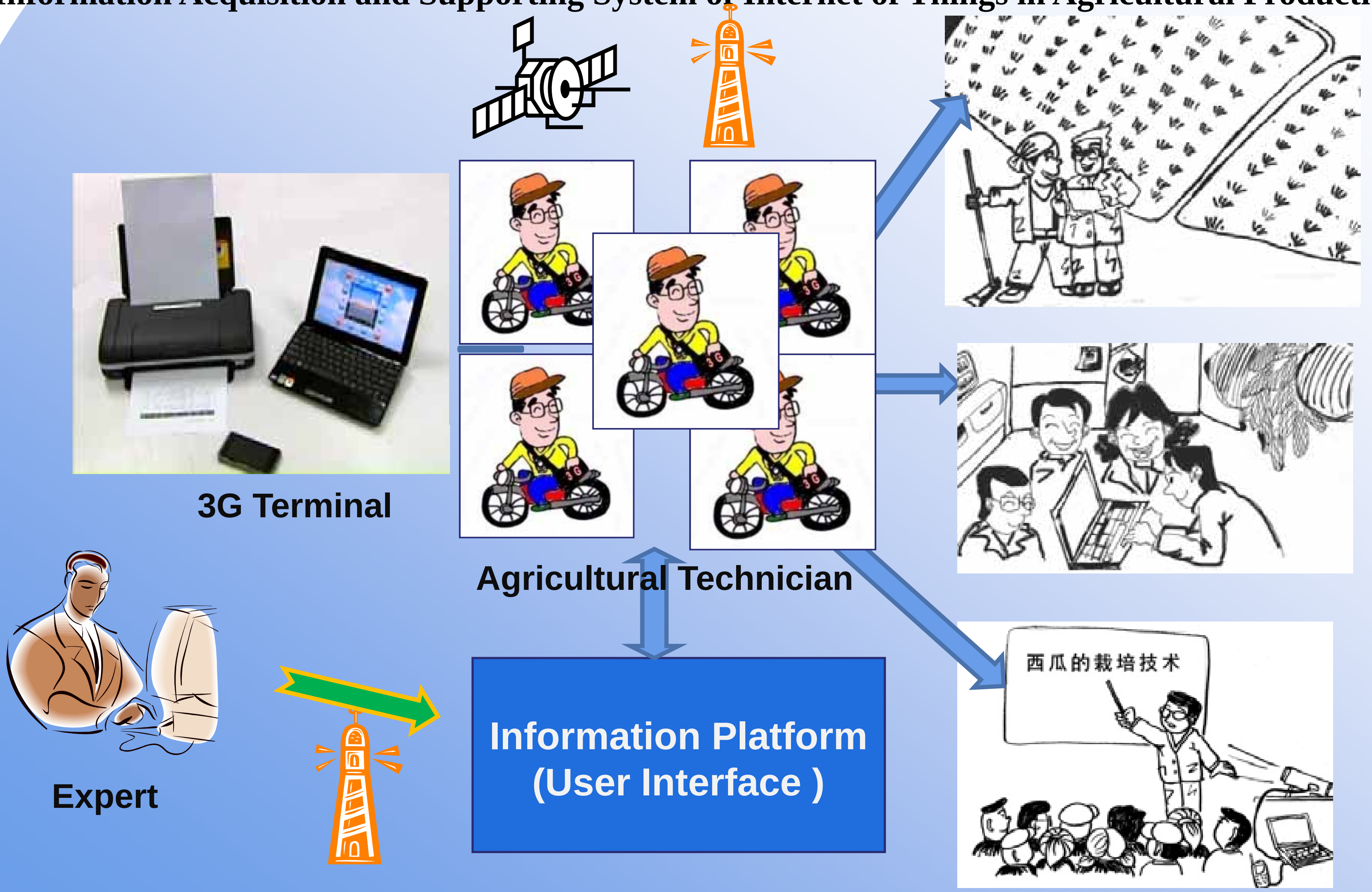


基层农技推广信息化平台 安卓

17:16
登出
工作交流
农技咨询
农技处方
推广日志
通知通报
灾情报送
浏览图片
市场价格
定位识路
系统帮助

3.Project Contents

Information Acquisition and Supporting System of Internet of Things in Agricultural Production



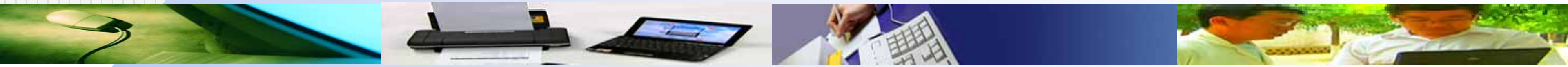
3G Terminal

Agricultural Technician

Expert

Information Platform
(User Interface)

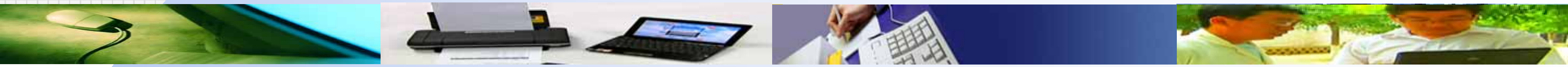
4.Obtained Effect



First, agro-technique extension and management efficiency are significantly improved

Using information technology platforms and mobile terminals, agro-technique extension staff may deliver vast , professional and individulized, agricultural information to farmers. Managers can accurately dynamically manage and scientifically evaluate the work of staff members by daily service recorded by GPS positioning in information platform and field work log written by staff members. This method greatly improves the overall efficiency and level of the agro-technique service.

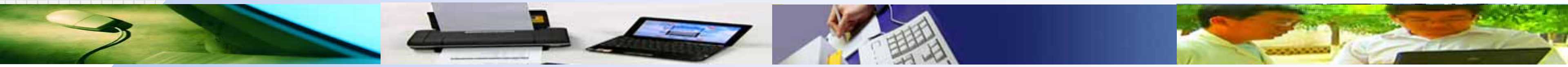
4.Obtained Effect



Second, capacity of the team of agro-technique extension is enhanced

By making full use of the rich and applicable multimedia teaching materials for agricultural production, online classrooms and videos, agro-technique extension staff can not only self-study the latest agricultural knowledge and skills, but also video communicate with experts or other staff members face-to-face. Thus their capacities and qualities are significantly enhanced.

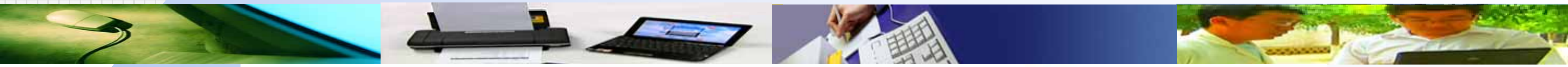
4.Obtained Effect

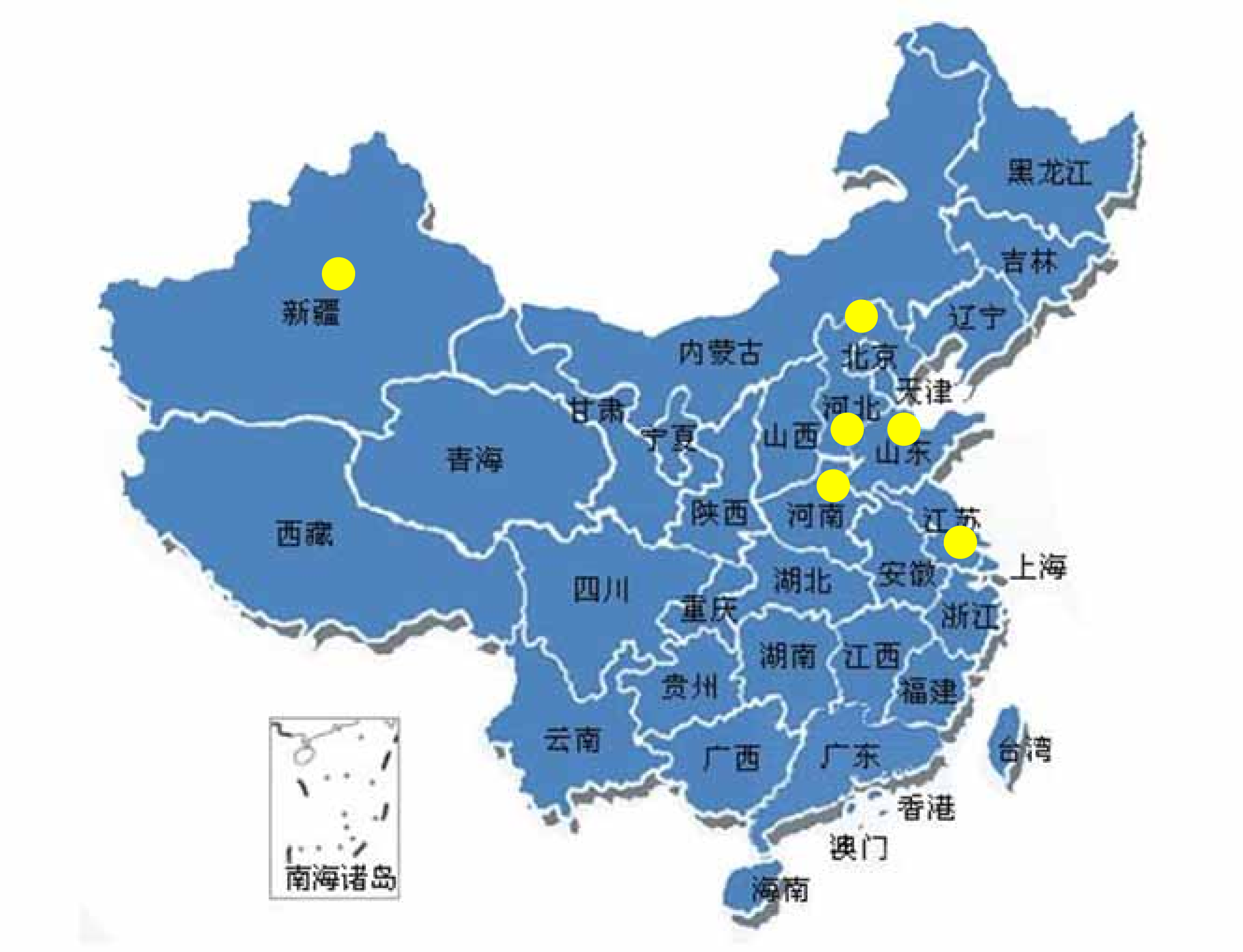


Third, functions of agro-technique extension are expanded

The information platform provides efficient means of information collection. Using the networked textension staffs, managers can quickly obtain information about meteorological disasters, pests and diseases, animal epidemics, market information. Moreover, the information platform makes a linkage between agricultural research and agro-technique extension.

5.Application Demonstration




黑龙江
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四川
重庆
湖北
安徽
浙江
湖南
江西
贵州
福建
云南
广西
广东
台湾
香港
澳门
海南
南海诸岛

Pilot demonstrations in Daxing, Miyun county in Beijing, Xinghua,Jiangsu, Luohe ,Henan and Turpan,Xinjiang

5.Application Demonstration

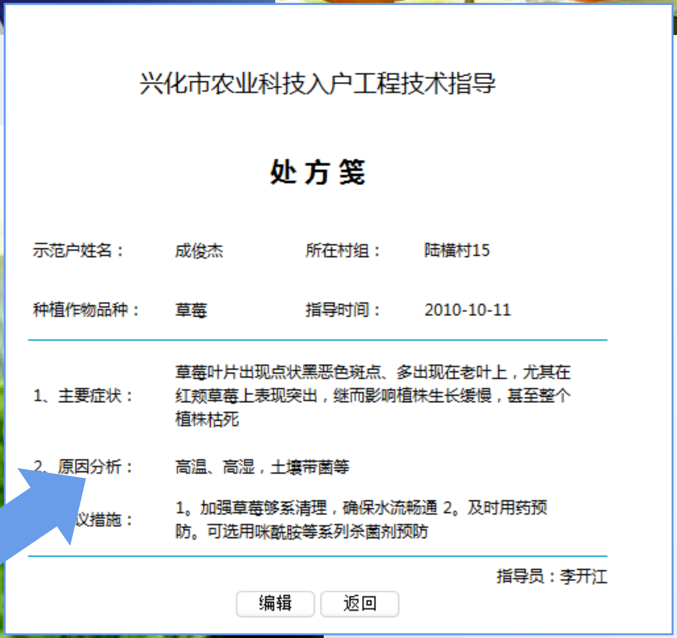
全国基层农技推广信息化培训
2010年示范县项目基层农技推广信息化培训班

Pilot demonstrations in Daxing,Beijing,Xinghua,Jiangsu, Luohe ,Henan and Turpan,Xinjiang

5.Application Demonstration

Providing Extension Services Everywhere at Any Moment

5.Application Demonstration



兴化市农业科技入户工程技术指导

处 方 笺

示范户姓名：	成俊杰	所在村组：	陆槽村15
种植作物品种：	草莓	指导时间：	2010-10-11

1、主要症状：草莓叶片出现点状黑恶色斑点、多出现在老叶上，尤其在红颊草莓上表现突出，继而影响植株生长缓慢，甚至整个植株枯死

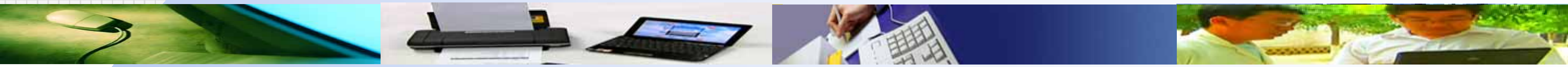
2、原因分析：高温、高湿，土壤带菌等

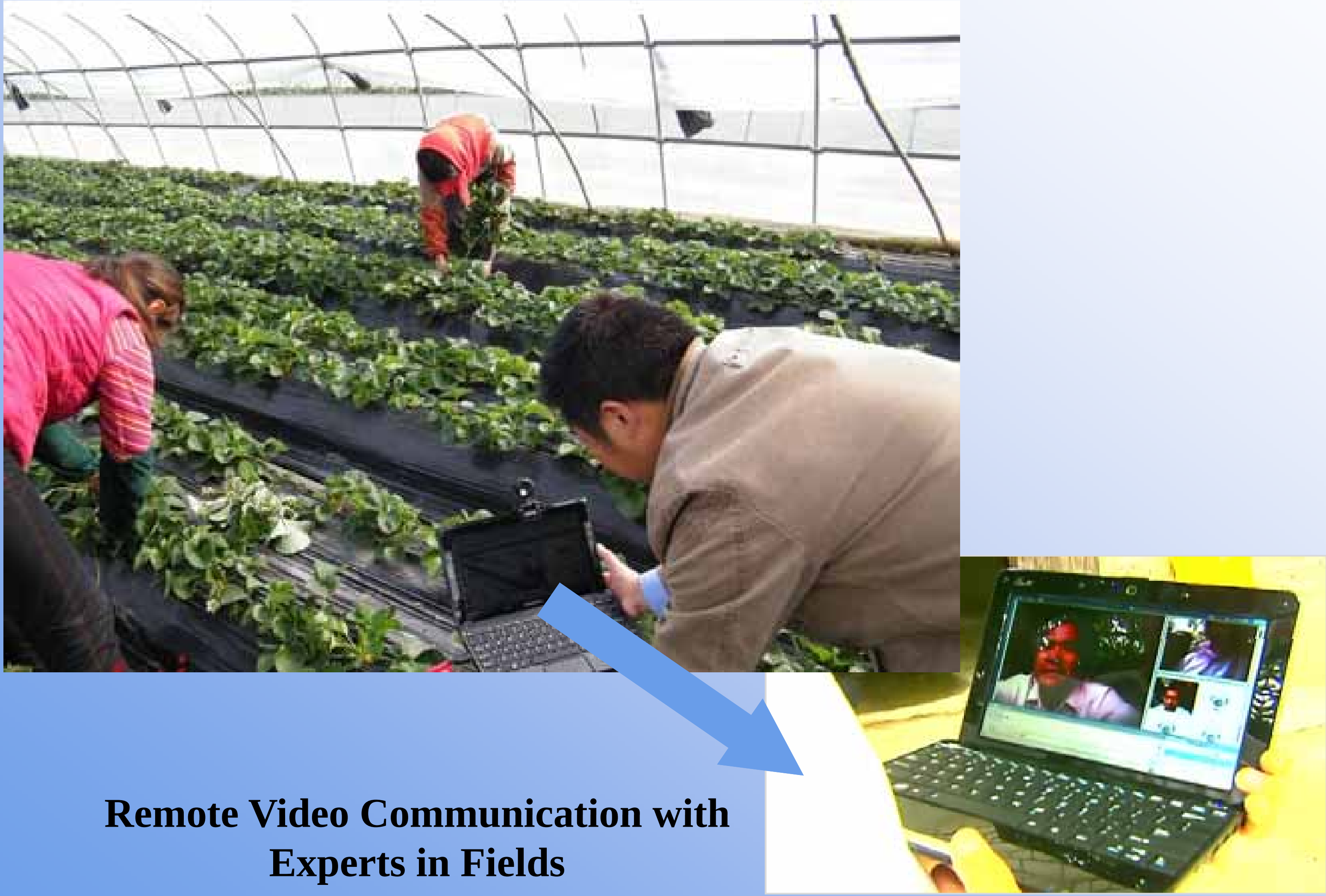
议措施：1。加强草莓够系清理，确保水流畅通 2。及时用药预防。可选用咪酰胺等系列杀菌剂预防

指导员：李开江

Printing Diagnosis Prescription Everywhere at Any Moment

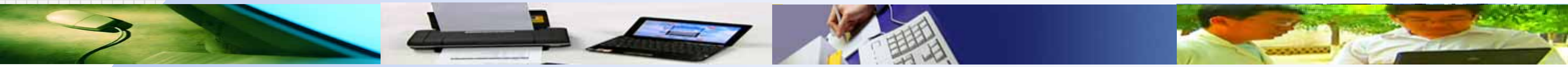
5.Application Demonstration

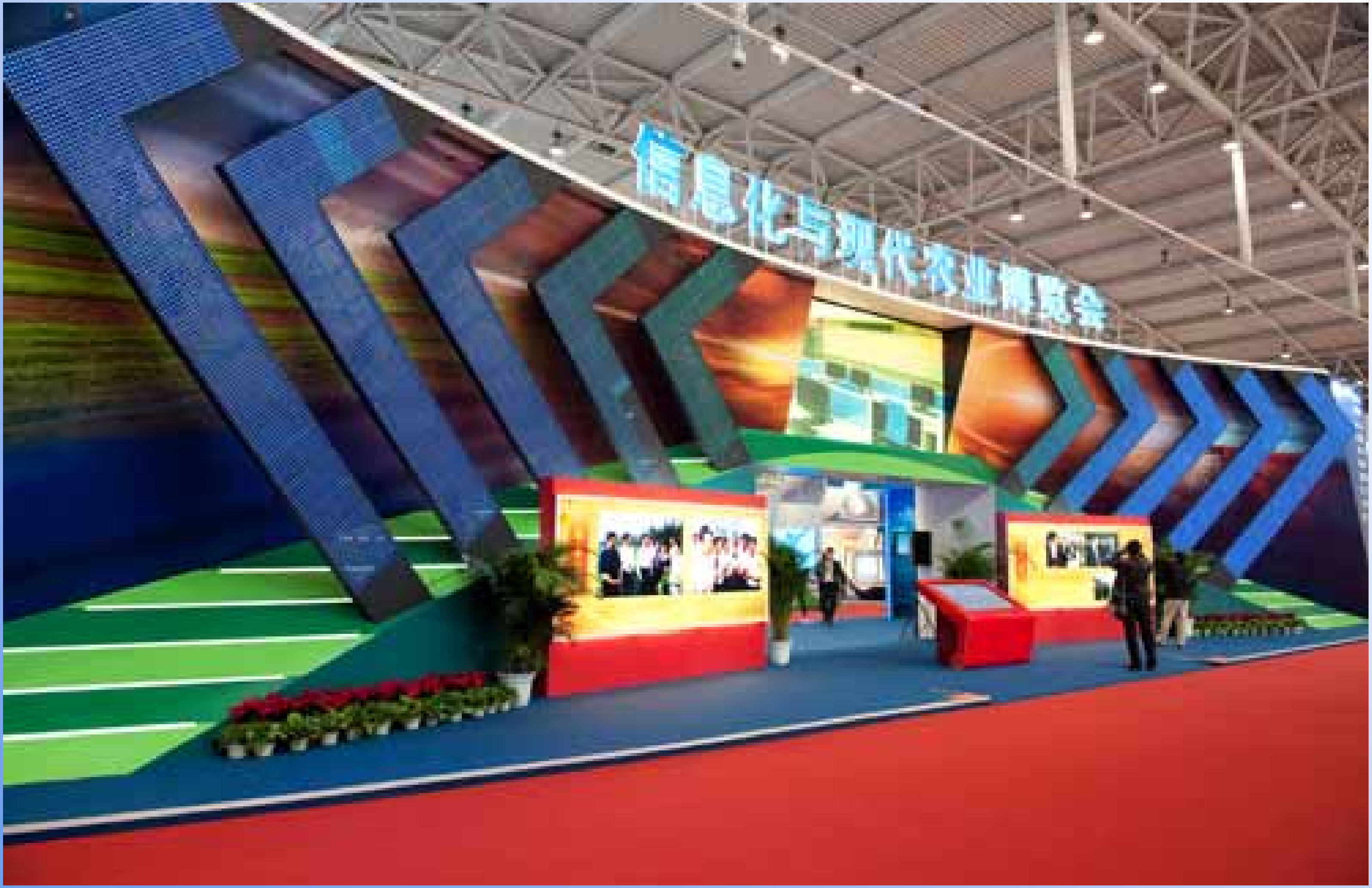




Remote Video Communication with Experts in Fields

6.Project Achivements




信息化与现代农业博览会

The 1st Exposition of Information Technology and Modern Agriculture (November 2010)

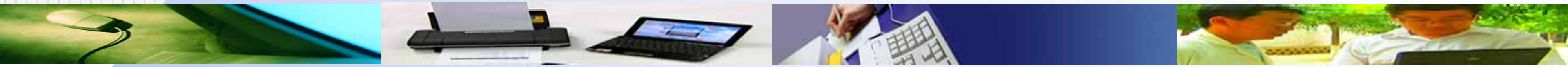
6.Project Achivements

The 1st Exposition of Information Technology and Modern Agriculture (November 2010)

6.Project Achivements

Excellent Design Award, Outstanding Organization Award and First Prize of Extension and Application

6.Project Achivements



“十一五”国家重大科技成就展
E1
“十一五”国家重大科技成就展
开幕式
“十一五”国家重大科技成就展

11th FPY National Major S&T Achievements Exhibition

6.Project Achivements

11th FPY National Major S&T Achievements Exhibition

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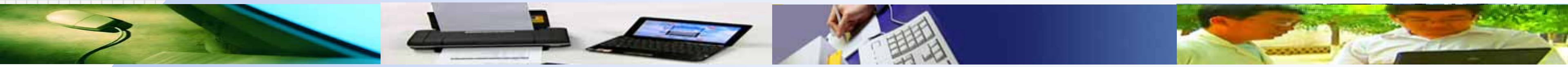

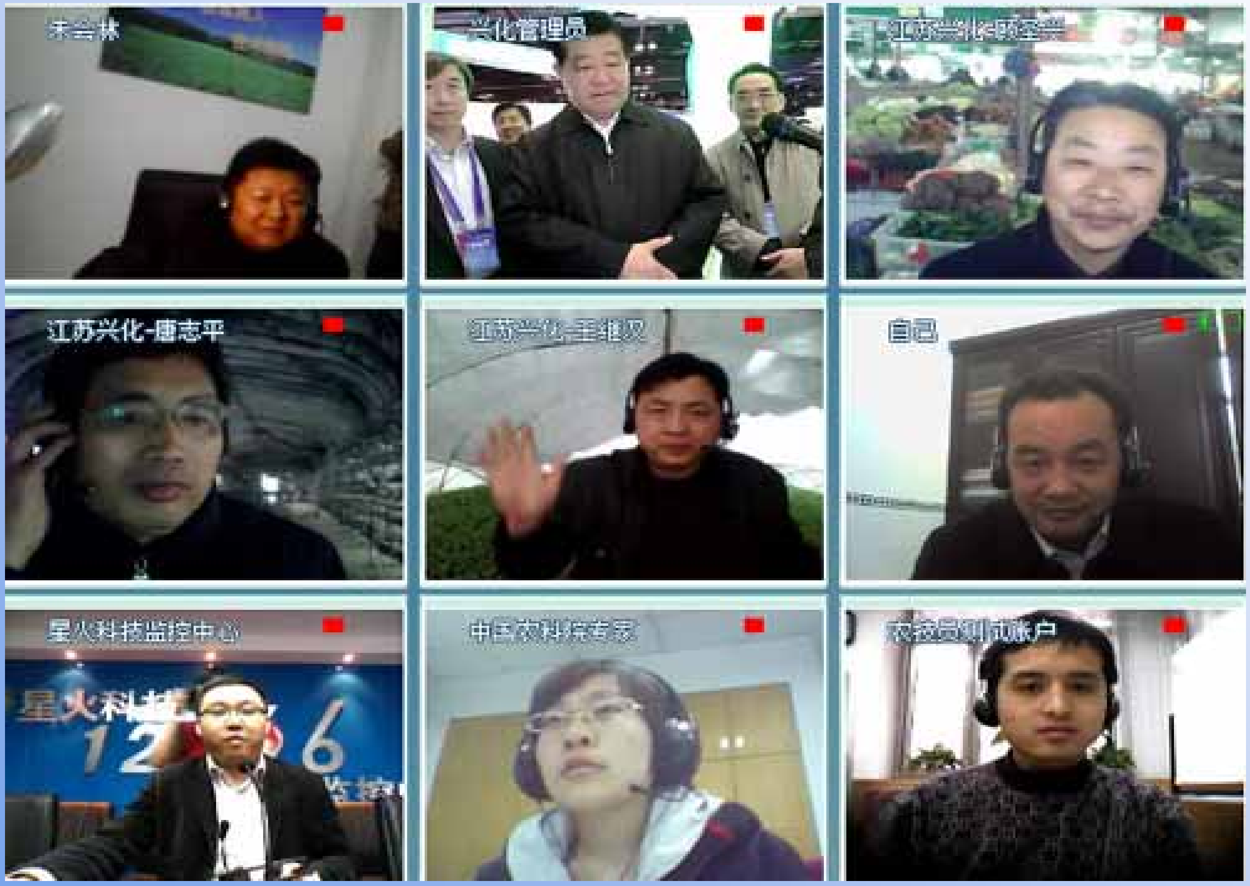
宋会林
兴化管理员
江苏兴化-顾圣兴
江苏兴化-唐志平
江苏兴化-王维双
自己
星火科技监控中心
中国农科院专家
农技员测试账户

11th FPY National Major S&T Achievements Exhibition

6.Project Achivements

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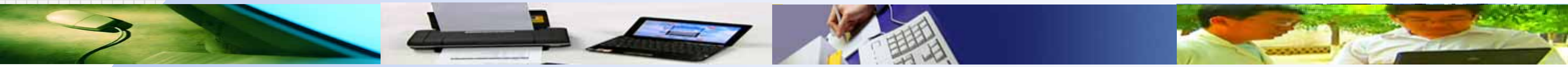

CCTV7
“ Technology Garden”

http://sannong.cntv.cn/program/kejiyuan/20110318/105860.shtml

Thank You！

wangwsh@caas.net.cn