



Industry Association Role in Agricultural Extension

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**Roundtable Consultation on Agricultural Extension
15th Mar 2012, Beijing**

Agenda 内容

1. Introduction of national association
协会简介
2. Farmer training model
农民培训模式
3. Successful cases
成功案例
4. On going improvement
不断完善
5. Benefits to all parties
对各方的好处
6. The way forward
展望

1A. There are 3 Crop Protection Industry Associations in China

1. China Crop Protection Industry Association (CCPIA):
A domestic national association under administration by ex-staff of Ministry of Chemical Industry. It's business focus is much more on the manufacture and is also acting as a technical expert for Ministry of Industry and Information Technology (MIIT) to evaluate pesticide production permit and implementation of industry policy.
2. China Association of Pesticide Development and Application (CAPDA):
A newly formed national association being led by ex-minister from Agriculture and headed by ex-ICAMA (pesticide regulatory) and the executive members are mainly from ICAMA network. It's business focus is on pesticide development & application
3. Crop Life China (CLC):
It is a national association under Crop Life International network which is formed by the research and development based Multi-National company of Crop Protection industry.

1B. Crop Life China Structure 植保(中国)协会是植保行业的民间协会

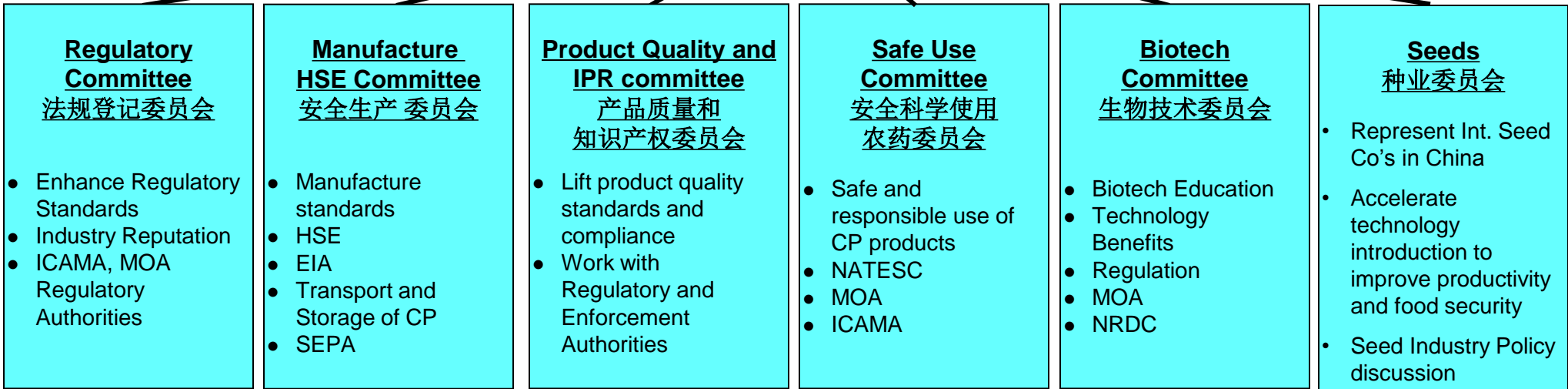
Chairman 主席
Frank Dietrich
 戴思成



Crop Life China
 Executive Committee
 (General Managers of members)
 各成员公司总经理组成行政委员会



Executive Director
 首席代表
He Fan 何帆



✓ Improve yield, quality & income 提高产量,改善品质,增加收入
 ✓ Improve food safety and environment 增强食品安全,提升环境保护



1C. Key partner & player in farmer training program 主要参加者



全国农业技术推广服务中心
National Agricultural Technology
Extension & Service Center



植保（中国）协会
CropLife China



Institute for Control
of Agrochemical
MOA

G I Z
German Technical
Representative

Partnership

Active
members in
the training
program

And relevant provincial & county level Agriculture Extension agents



R&D based
MNC with
commitment to
farmer training

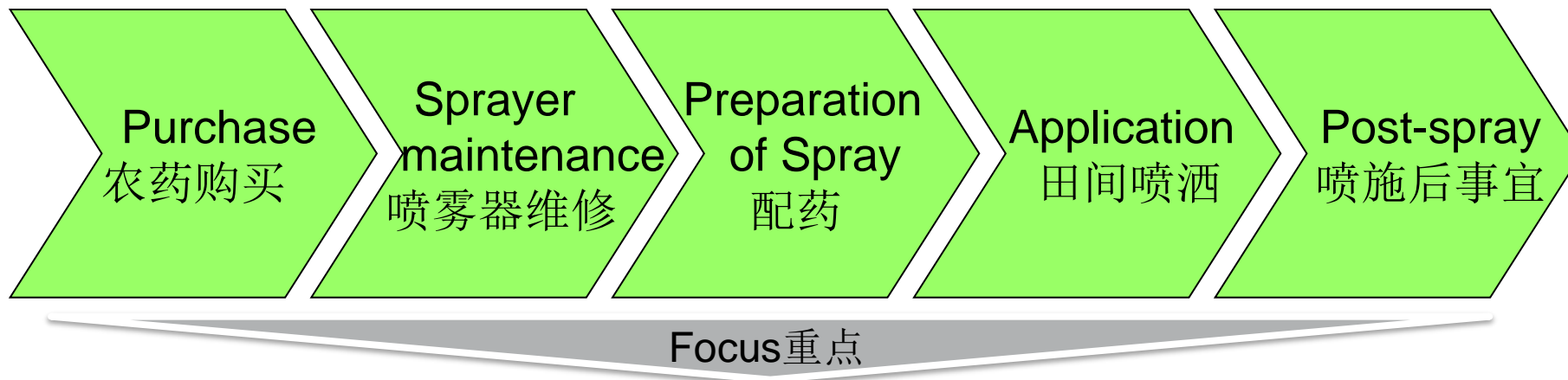


2A. Farmer safe use pesticide training model

农民安全科学使用农药的培训模式

1. Focus on one county at township level
以县为单元,以镇为重点
2. National, provincial and county level extension authority support
得到中央,省和县的有关部门支持
3. Commitment from member company
协会成员公司的积极参与
4. Target trainee: influential farmer, extension worker & retailer
以科技示范农民,基层推广员和农药零售商为培训对象
5. Grower's economic benefit first than social & environment benefits
以农民经济利益为主导,辅以社会和环保利益
6. Third party assessment
由第三方农业大学评估
7. Customize promotional material for trainee
地方化的农民资料和手册,实用的物料
8. Training quality - Master trainer has been trained
高培训质量-培训师经过培训,内容互动,应用性高

2B.Training Content 培训内容



1. 对症买药
Read label

2. 分辨真假
Genuine product

1. 没跑,冒,滴,漏
Maintenance

2. 使用后要清洗
Clean after use

1. 用量器量药
Measure tool

2. 穿保护衣物
PPE

1. 个人卫生
Hygiene

2. 综合防治
IPM

1. 安全间隔期
PHI

2. 空包装处理
Triple rinse

3. 安全地储藏
Safe storage

Interactive training by trained master trainer

To delivery the responsible use of crop protection product five golden rules

3A. Successful Case: Guanghan, Sichuan project in 2006

Activities:

- Training local doctors, nurses (100) 医生培训
- Train-the-trainer (30) 培训师培训
- Mass training (2,800 farmers, retailers, extension officers)
大规模的集中示范户培训
- 10,000 posters, 2,800 manuals & 52,000 technical materials
distributed 宣传资料派发
- Audit: Baseline survey and Post-training survey 第三方效果评估



3A. Successful case: Guanghan, Sichuan project in 2006

▶ Audit by Sichuan Agricultural University

四川农大评估:

1,917 and 1,867 trainees surveyed pre- and post-training

▶ Key result – Knowledge and behaviour changes in

意识和行为改变:

- Pesticide purchasing 购买
- Reading product labels 看标签
- Measuring pesticides 量度用量
- Use of personal protective equipment (PPE) 保护衣物
- Empty container and waste disposal 空包装处理
- Secure pesticide storage 安全储存

▶ Key result – Cost savings for farmers 农民用药成本降低

3A. Successful case: Guanghan, Sichuan project in 2006

▶ Cost savings over 2005 跟 2 0 0 5 年比较, 节省成本

- Using recommended application technology, **61%** of trained farmers reduced pesticide bills by **17%**
6 1 % 受训农民节省 1 7 %
- **Savings by crop** 不同作物的节省

Tomatoes 19%	Chillies 22%	Cucumbers 17%
Lettuce 13%	Celery 11%	Eggplant 19%

- **How:** In line with IPM principles – 原因
 - *tailor-made spray programmes* 合理喷施
 - *using the most appropriate & effective products* 合适农药
 - *applied at correct dose, right time* 合适剂量和时间

saved the farmers money, and improved their income.

3A. Case study: Guanghan, Sichuan project in 2006

Impact & Benefits Summary 主要成效

- Responsible use knowledge (GAP) transferred & applied
农民得到知识及活学活用
- More responsible handling of “products usage cycle” observed
科学合理使用农药
- Reduced input costs – increased farmer incomes
降低用药成本
- % of produce exceeding MRL limits remains low
农残合格率保持很高
- Sichuan government agreed to fund continued training in 2007
得到地方政府的认可和继续投入
- CLA/CLC program transferred to Guangdong Province in 2007
模式可重复

3A. Guanghan City government invested another RMB200K for on going Female Farmer training until 2007

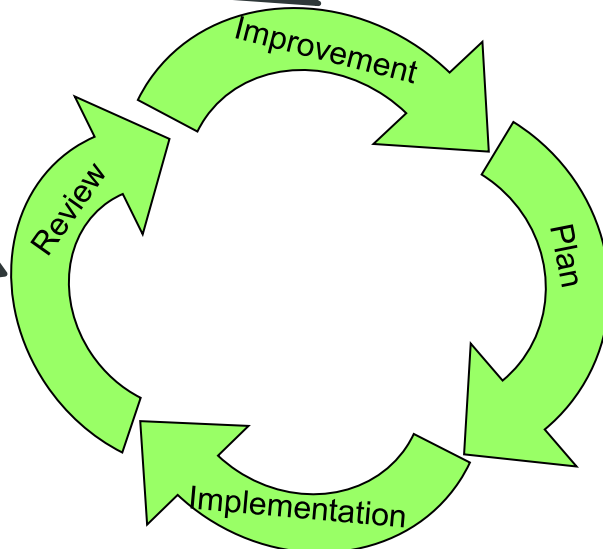
因为项目的成功，地方政府再投入20万在2007年培训农女民工



4. Ongoing improvement of model 不断完善培训模式

1. Zengcheng project (**localize media & farmer hand book**) 2007
2. Shipping project (**local government support & triple rinse of container & its collection scheme**) 2008
3. Sino-German container management in Hubei (**clear model & role between government & national association**) 2011
4. Wheat professional applicator training in Henan (**same spraying equipment company from rice project to join with**) 2011

1. Guanghan project (**gained local government support to test container collection model**) 2008
2. Meixian secure access project (**need sufficient farmer training**) 2011
3. Hunan Rice Professional applicator training (**sprayer companies participation is critical**) 2010



1. Guanghan farmer training 2006
2. Hunan Rice Professional applicator training 2009
3. Meixian farmer training in secure access 2010
4. Sino-German partnership project in container management at Hubei 2010

1. Guanghan ongoing project with local government support to expand to women farmer training 2007
2. Meixian secure access project to combine all learning 2012

4A. On going improvement – ShiPing project in 2008

Safe & responsible use training model enhancement in Shiping, Yunnan to address the container management issue to protect the Pearl river origin environment with strong **local government commitment**

云南石屏县进一步完善模式,在安全用药培训活动,加入空包装处理,保护珠江水原头



4B. On going improvement: Guanghan project in 2008

Container management in Guanghan with **cross government functions support** to identify a pragmatic model in container collection which is adoptable in the small holder farming communities.

四川广汉多政府部门参加的空包装处理,寻找有效的方法改变小农户的行为



Before 前



After 后

4C. On going improvement: Professional spray team training project in 2009-2012

► 活动 activities:

- Kick off ceremony – **local government support & commitment**
- Master trainer training – training skill & knowledge on machinery
- Spray applicator training (2009- 3000; 2010 - 2000 ; 2011 – 750)
- Customized training material to all professional applicator
- Responsible use poster distribution
- Project audit and review during the program
- Third party assessment



4D. Customized training materials



5A. Benefits to grower, consumer & society

对农民,消费者和社会的贡献成效显著

Workable training model under different rural condition 培训模式适合在不同的三农背景

广汉Guanghan

农民:本地,城市化
收入:大概4千
作物: 大田,蔬菜
农业化:90%
农民数:44万

增城Zengcheng

农民:外来,专业化
收入:大概8千
作物: 蔬菜
农业化:60%
农民数:59万

石屏ShiPing

农民:本地,传统
收入:大概2千3
作物: 大田,果菜
农业化:90%
农民数:26万

成效一致same output

1. 农残合格率高 Safe Produce – residue within limit
2. 农药投入降低 Lower Pesticide input
3. 个人卫生保护提高 Self hygiene awareness
4. 因农药引起事故减少 Less adverse incident
5. 环保意识提高 Higer Env. protection awareness

5B. Benefits to other parties 各参加者的效益

Dept of Agriculture
农业部门

Supporting extension authority in producing safe food

为农民生产服务,生产无公害农产品,保护环境

Assessor
评估的大学

Involvement in agriculture production & internship opportunity for student

参与农业生产,作学术的专题研究



Microsoft Office
d97 - 2003 Docum



Microsoft Office
d97 - 2003 Docum

National Association
植保协会

Service to members and enhancing association reputation & image

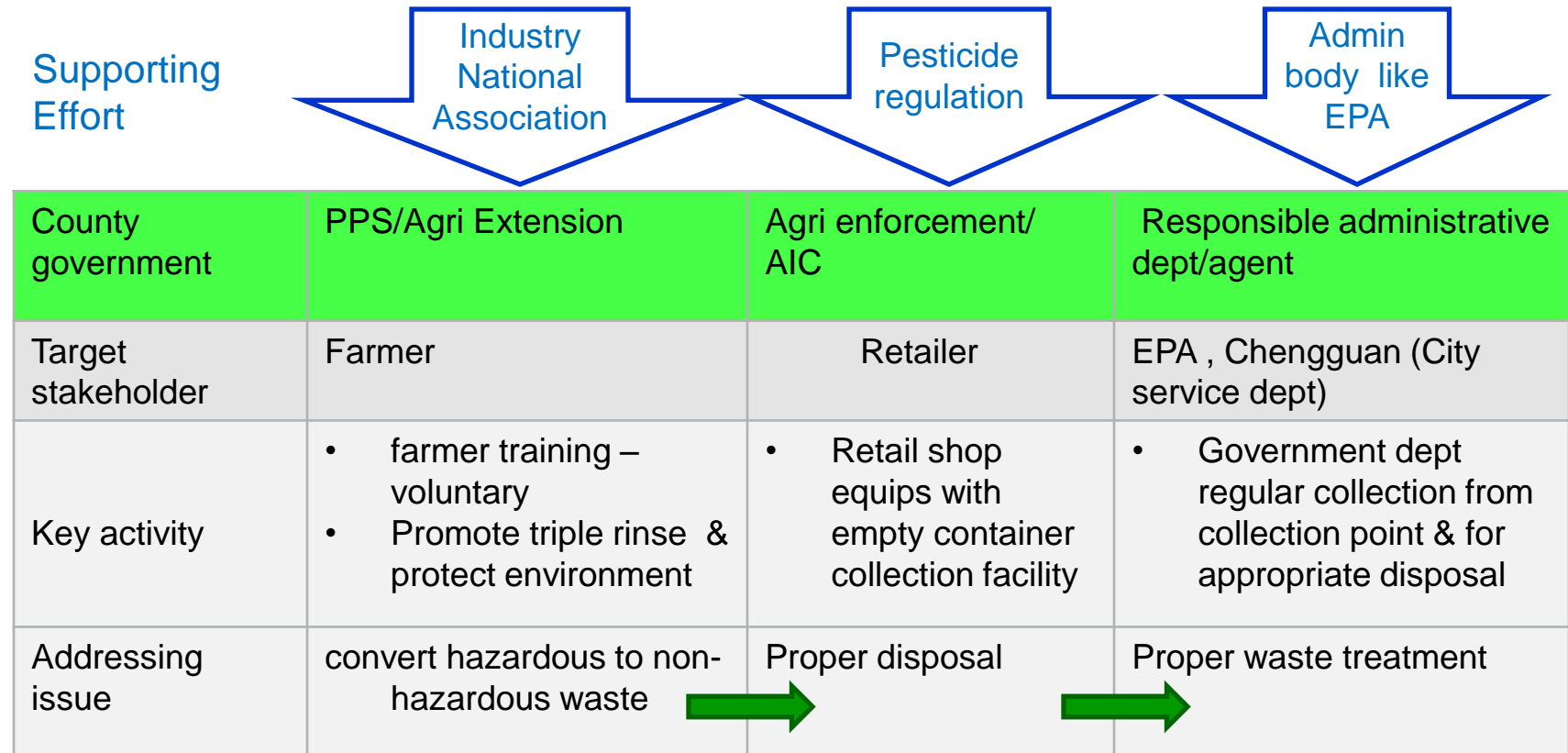
为成员公司服务,提高协会的权威性和在行业的知名度

Member company
成员公司

Building brand at grower level & CSR image
通过协会和推广部门合作,直接面向农民,提高公司在农民和行业知名度

5C. For government reference : Hubei project 2010-2012

Sino-German government project in verifying the empty container management model which is workable in China for government scale up



• Slide 20 **Current project**

CLC & industry

Hubei ICA & county

GIZ

6. Way Forward

1. Syngenta takes leadership position in CCPIA to set up the Paraquat Stewardship Alliance work group to promote and advocacy of product stewardship and corporate social responsibility to the domestic crop protection industry
2. In the Stewardship Alliance work group, setting up the fund to conduct following stewardship program:
 1. Medical stewardship: set up medical consultant team and 24 hours x 7 days hotline service
 2. Rural doctor training (targeting at >10,000 rural doctors in 2012)
 3. Build up website for communication of responsible use
 4. Train the trainer in conducting large scale farmer training (more than 1000 training events will be conducted by members in 2012)
 5. Materials for training program: poster, manual, PPE.....
3. More government investment and stakeholder engagement.....

Thanks

谢谢

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