

青树中心图书馆服务农业
项目介绍与思考

Introduction to Evergreen Central
Library's Program of Serving
Agriculture

牛托稳

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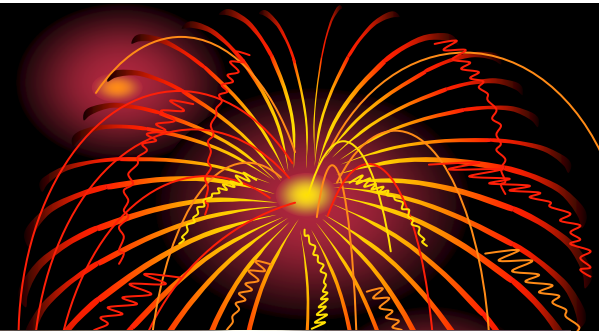
甘肃省通渭县第一中学

Gansu Tongwei No.1 Middle
School





通渭一中
“青树中心图书馆”
在通渭一中原图书
室基础上，于2001
年受“青树教育基
金会”援助，建成
拥有图书近4万册
自动化图书馆。目
前有校内、外读者
两千多名。

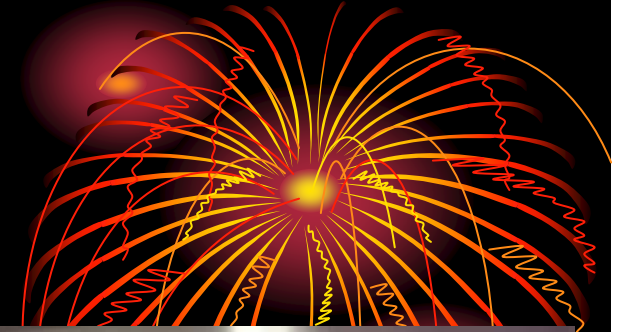


辐射通渭县公共图书馆、西川农业园区、通和初级中
学、马营中学等4个卫星图书站。





Evergreen Central Library in Tongwei No.1 Middle School is an automated library built up in 2001 by the assistance of Evergreen Education Foundation based on the school library. It has nearly 40,000 books and over 2,



It involves 4 satellite libraries—Tongwei Public library、Xichuan agricultural zone、Tonghe Junior School、Maying Middle School.



通渭县农业基本情况介绍：

通渭县地处黄土高原丘陵沟壑区，全县**47万**人口，其中农业人口**45.6万**，全县总面积**2908**平方公里，其中耕种面积**180**万亩，属黄土高原典型旱作传统农业种植区，境内以小麦、马铃薯、小杂粮种植为主。近年来大力推广设施农业。



Introduction to agriculture in Tongwei: Tongwei is in the hilly and gully area of Loess Plateau, with a population of 470,000, 456,000 of which are the agricultural population. Its total area is 2908 square km, of which 180 million mu (亩) of area under cultivation. It is typical lytraditional agriculture area of dry farming in Loess Plateau, where wheat, potatoes and minor cereals are mainly planted.



对传统农业的思考：

1、自然灾害频繁

①旱灾：境内绝大部分地区靠天然降水，水利设施贫乏，灌溉农业少。

干旱类型指标

类型	时段	指标
春旱	3~5月	3~5月总降水量 $<80\text{mm}$ ，4~5月过程降水量 $\geq 10.0\text{mm}$ ，间隔日数 ≥ 40 天。
初夏旱	6~上旬/7	总降水量 $<70\text{mm}$ ，日降水量 $\geq 10.0\text{mm}$ ，间隔日数 ≥ 30 天。
伏旱	中旬/7~中旬/8	总降水量 $<85\text{mm}$ ，日降水量 $\geq 10.0\text{mm}$ ，间隔日数 ≥ 25 天。
秋旱	下旬/8~中旬/10	总降水量 $<90\text{mm}$ 。

Consideration of traditional agriculture:

1、Frequent natural disasters

① Drought: Most of the area depends on natural precipitation; lack of water conservancy facilities; few irrigated agriculture

Indicators of drought types

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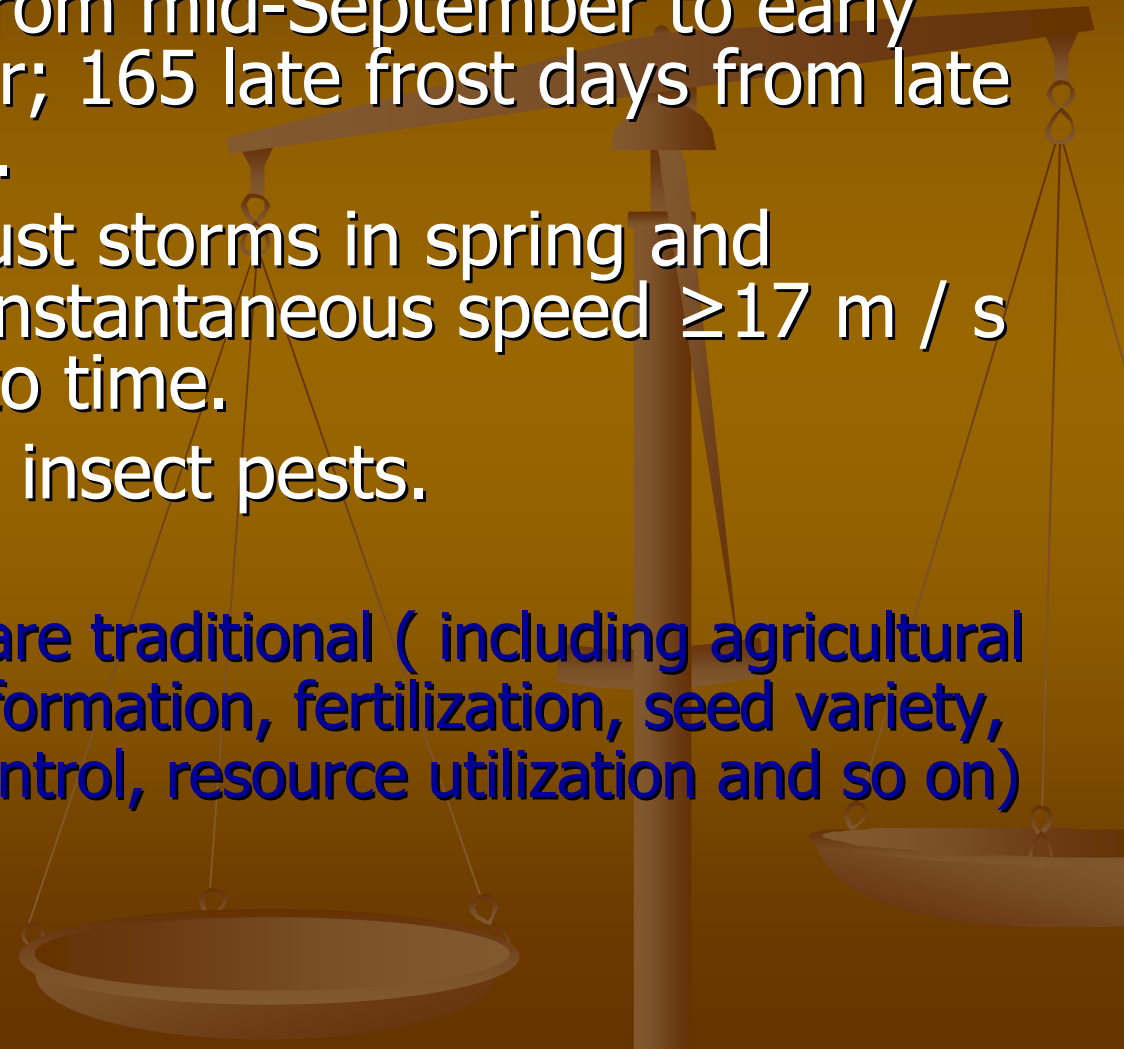
②雹灾、暴雨：根据气象部门统计，年均雹日27天，年冰雹最多7次。

③霜冻：早霜日数（地面温度 $\leq 0^{\circ}\text{C}$ 的日数）从9月中旬至10月上旬年均70次；晚霜日数从4月下旬至6月上旬年均165次。

④大风：春夏沙尘暴频繁，瞬时风速 \geq 米/秒以上大风四季时有发生。

⑤家作物病虫害。

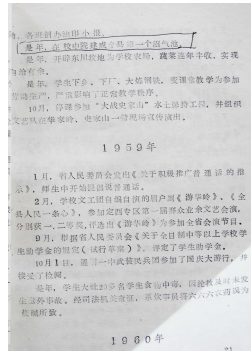
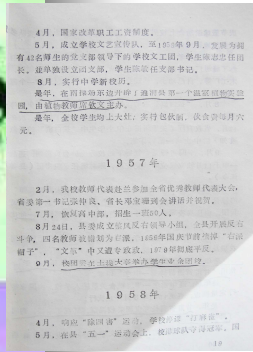
2、耕作方式传统（包括基础农业设施改造、施肥、种植观念、种子品种、病虫害防治、资源利用等）

- 
- ② Hail, rainstorms: 27 hail-days on average and hail weather 7 times every year.
 - ③ Frost: 70 Early frost (surface temperature $\leq 0^{\circ}\text{C}$) days on average from mid-September to early October every year; 165 late frost days from late April to early June.
 - ④ Wind: Frequent dust storms in spring and summer, wind of instantaneous speed ≥ 17 m / s occurs from time to time.
 - ⑤ Crop diseases and insect pests.

2、Farming methods are traditional (including agricultural infrastructure transformation, fertilization, seed variety, pest and disease control, resource utilization and so on)

学校图书馆对农业服务的便利条件

- 1、人群**95%**来源于农户（学生），熟悉当地农业生产情况，关注农业、有知识；
- 2、图书馆有一定数量的农业技术书籍、资料；
- 3、学校教师中有**70%**以上家庭从事农业生产；
- 4、学校有长期开设农业类课程的历史和资源；

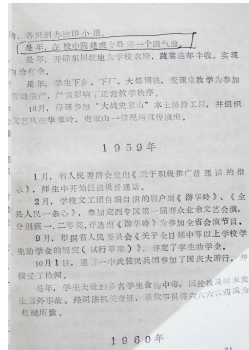
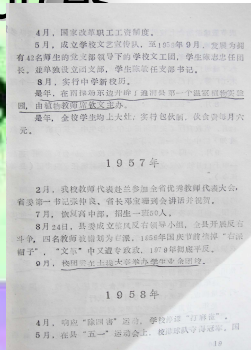


- 5、学校实验室有可供农业科技实验的器材和设备。



Condition for the school library serving agriculture

- 1、95% of students are from farmers; they are familiar with agricultural condition and pay attention to agriculture; they are knowledgeable.
- 2、The library has a certain number of materials on agricultural technology.
- 3、Teachers whose families are engaged in agricultural production are more than 70%.
- 4、Courses on agriculture are involved for a long time and have retained rich resources



- 5、Laboratories in school have equipments for experiments on agricultural science and technology experiments.

学校图书馆服务农业的主要方式及定位

1



结合学生
教学内容

化肥

农药

种子

新型能源

农机具推广

土壤分析

新型设施农业

Major ways and orientation of school library serving agriculture

1、 Spread Information



Combine with Teaching

Fertilizer

Pesticides

Seeds

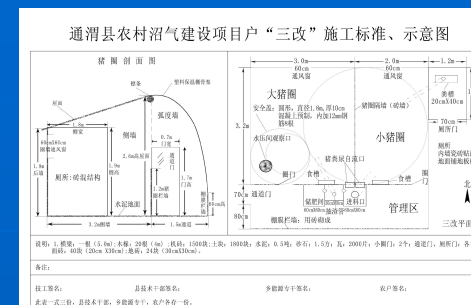
New Energy

Agricultural Machinery

Soil Analysis

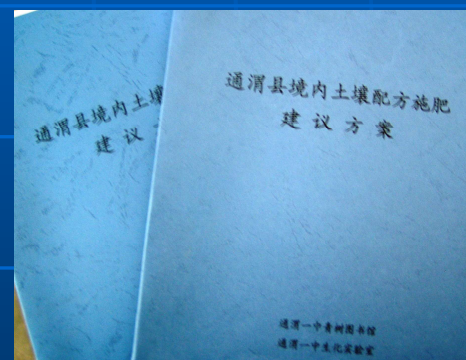
New Protected Agriculture

2、技术破解



农业沼气技术（公共图书馆手册）

地膜种植（单沟、单垄，双沟双垄，双沟全覆膜，日光温室）



土壤分析及化肥配方

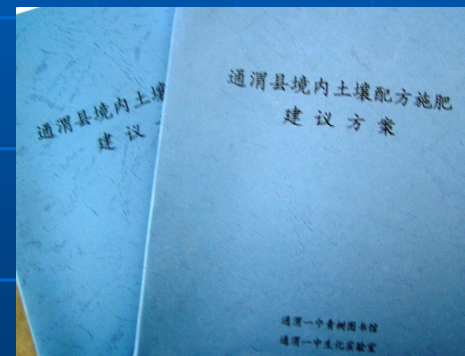
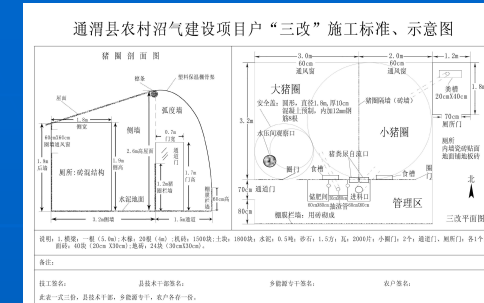
农药和除草剂使用技术

2、Technology



biogas technology in agriculture (public library manual)

plastic film mulching cultivation



Soil analysis and fertilizer formulations

pesticides and herbicides

3、学生实践能力培养 Cultivate students' practical ability

①、培养学生科学价值及人生观

Develop scientific philosophy of life and values

②、扩大知识的运用及迁移

Expand the use of knowledge

③、培养学生解决问题的能力

Cultivate students' capacity of problem solving

④、带动家庭受益

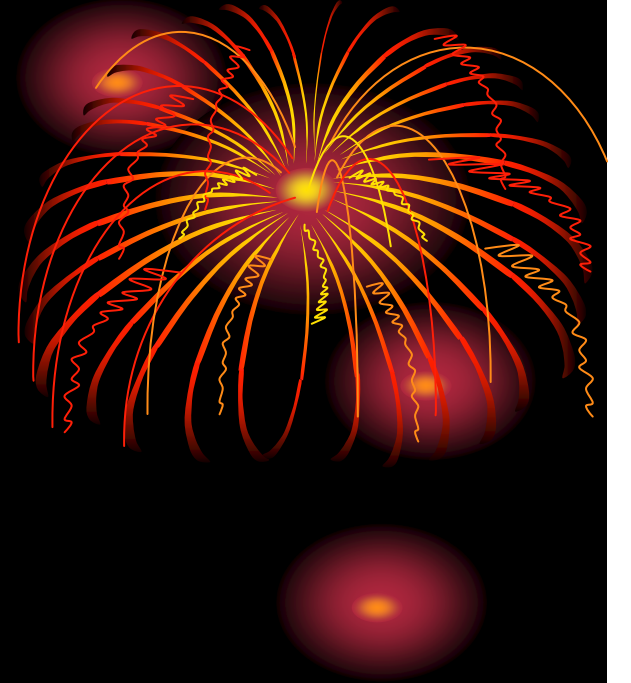
Benefit families

学校图书馆动能的延升

- 1、把学校图书馆辐射到农村、农户；
- 2、把图书馆的触角深入到教学的各个领域，深化其辅助教学功能（青树设计小项目）；
- 3、从静态办馆到动态办馆；从上门借书到送书上门的转换（使农技类图书进入农户手中）；
- 4、开创校馆与农技部门和乡镇文化站的联合；
- 5、重点联系农村治富裕能手，培养有文化的新型农民，带动农民治富。

Extension of the school library's function

- 1、 Extend the school library to farmers;
- 2、 Extend the school library to every aspect of teaching, deepen its function of assisted instruction (small scale programs) ;
- 3、 From static library to dynamic library; from lending books in library to sending books home (send agricultural books to farmers);
- 4、 School library cooperates with agricultural technology sectors and culture stations in townships;
- 5、 Communicate with skilled and rich farmers mainly to cultivate knowledgeable farmers and help others become rich.



谢谢！
Thanks!