

# 必须把推广免耕法作为水土保持的战略对策

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## 提 要

中耕除草、深翻轮休等传统耕作制度，常常造成严重的水土流失。实行免耕种地，作为水土保持的战略对策，是当务之急。免耕法不仅能有效的保持水土，而且能提高土壤肥力，增产增收，节省劳力和减少投入。目前的障碍，主要是思想保守，沿袭守旧，免耕制度不配套。建议奖励实行免耕的农户；研制价廉、高效和无污染的除草剂；先办试点，以点带面，全面铺开；用行政和经济手段逐步废除传统耕作制。

新中国成立以来，我国在治理水土流失方面做了大量的工作，广大科技工作者付出了辛勤的劳动，取得了较大的成绩。但是，我们应该清醒地认识到，成绩仅仅是局部的。农地的水土流失没有得到有效的治理。各地工作不平衡，紧松不一。黄河流域抓得紧，长江流域抓得松；北方抓得紧，南方抓得松；流失量大的地区抓得紧，流失量小的地区抓得松；重山上的水土流失治理，轻农田的水土流失治理的现象普遍存在。部分地区流失的速度大于治理的速度，流失量触目惊心，已经到了不能容忍的地步。湖北省黄冈地区白莲河水库，13年间淤积量为1.78亿立方米，年平均进沙量为147.8万立方米；上游河床每年抬高1米。据推算，全区每年淤掉1座中型水库。湖北咸宁地区陆水河上的一座桥，五十年代初桥下能通大木船，现在该桥已被泥沙埋葬了。据“鄖西县水土流失调查报告”，全县4万公顷耕地，有近2.7万公顷流失严重，年平均流失量210余万吨，相当于每年流失6毫米厚的表层。湖北素以“千湖之省”著称于世，五十年代初期，江汉湖群面积为83.3万公顷，由于泥沙淤积和围垦，现仅剩23.7万公顷，数量减少700多个。有的湖泊已开始沼泽化。目前，全国有机质含量在0.6%以下的农田占耕地面积的10.6%，土壤耕作层变浅的农田占20%，地力下降已构成发展种植业的潜在危机。

水土流失如此严重，人们通常归咎于滥砍乱伐、垦荒种地、开山采石、修筑道路，等等。然而，传统的耕作制度对水土流失的影响却往往不能引起人们足够的重视。

据报道，美国俄亥俄州西克顿附近，坡度为6%的玉米地带，采用传统的耕作方式，1969年7月的一场长达7小时、雨量为127毫米的大雨，使每公顷流失表土达44.7吨；而在同等状况下采用免耕法的玉米地里，每公顷流失仅270公斤。据有关部门试验表明，耕翻地的风蚀比免耕地厉害。美国福克纳先生1943年在《犁耕者的愚蠢》一书中指出，本世纪二十年代和三十年代中所出现的毁灭性的水灾和遮天蔽日的尘暴，都是由犁耕所引起的。

湖北现有耕地373.1万公顷，水田旱地近乎各半。旱地多分布于丘岗，冬季耕翻播种，受风害侵蚀；夏季松土锄草，受暴雨冲刷。土肥大量流失，污染塘堰江河，危害农业生态环境。因此，改变传统耕作制度，实行免耕种地，已是当务之急。

实行免耕法，既是必要的也是可行的。美国10年前就有1,802.5万公顷土地采用免耕种植，



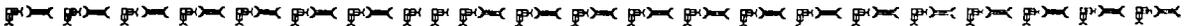
# Popularizing no till as strategy of soil and water conservation is necessary

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## Abstract

The conventional tillage system, such as harrowing, weeding by digging and tillage rotation, etc., often causes severe soil loss. It is of great urgency to perform no till as the strategy of soil conservation. The system in no till can not only conserve soil and water efficiently, but also raise soil fertility and increase production and other benefit, saving manpower and reducing the input. The present obstruction is thought mainly in conservative ideas, following old convention and unavailable tillage methods. It is suggested to encourage and reward the farmers performing no till, to manufacture weed killers in low price, high efficiency and no pollution, to set model experiment to promote the work in larger area and to spread in full scale, to abolish conventional tillage system gradually using administrative and economic means.



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site. The history is hard, if it went along the old routine, the Banqiao reservoir will collapse certainly. A reservoir in Sichuan Province had been collapsed for five times after building for five times, 13 sets of dams of Yunnan Province were broken down in a time in 1985, a recent burst of a great dam in Shanxi Province destroyed 18 villages, submerged 300 or more villages. The number of 90 dams collapsing every year, announced in former years, might have been topped now. It is said that water-conservancy projects can change into water disaster projects if the soil and water conservation is neglected.