

## Weed Invasion: A Challenge for Food Security

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### INTRODUCTION

World is facing shortage of food due to many reasons. One of the most drastic reason in the decreased production of crops is the production of weeds. Weeds may compete for light, nutrients, soil, space and for many other resources with crops and ultimately decrease their production. This decreased production of crops and increase prices which affect the economy of the country. Increasing production of crops can be achieved by reducing the crop yield gap which is done by the identification and alleviation of major impediments such as weeds. Many techniques and methods are applied to limit the production of weeds. Appropriate weed management has the potential to ensure food security by enhancing productivity. But many techniques which are effective in certain parts of world are not effective in other because of different environmental conditions and genetically modification of crops. Apart from technology many countries face problem in managing the weeds because ignorance of vast majority of farmers about the weed problem, the inadequate capacity of the extension personnel and the insensitive administrators and policy makers. Still weed scientists of many countries of the world are collaborating and working together to produce effective localized weed control method to meet food security and to increase the production of crops which ultimately limit the shortage of food. In this article, I am going to discuss, the invasion of weeds over the crops which causes a dangerous condition for food security. Firstly, it is informed that some of the weeds are very beneficial also for the environment and medicinal importance. Weeds may be vault from environment changes also. The major drawback of weeds is that the weed competes with the human economically important crops and cause a drastic loss in crop yield.

It may have happened that sometime weeds invade over crop plants as they survive in many critical test conditions. Domestic crops

are not able to survive in most stressed states but as compared while unwanted plants have excellent resistance against stress conditions.



### **Weed Invasion Related to Food Security**

Weeds competes for nutrients, water, air, light, and minerals with domestic's crops and make yield losses. Weeds cause interference with variety of human needs. So, human also tries to limit the weeds' activities by different techniques and methods. The methods of effective herbicides are applying over the weeds are useful and adequate, but in case of crops, this practice is not taken good because the potent herbicides which kill the weeds also affect the crop and produce toxicity in fruits. Weeds controlling is the main subjective course of agricultural departments, and weed control is high-esteem practice at any developing level. As the crops will decrease in production, demand increased and the price rate become elevated, which cause undernourishment poor peoples. For all this crisis, to live, we must cover the large gap of crop yield. Crop yield gap is mainly filled by increasing the productivity of crops by controlling the production of weeds.

### **Factors that Influence Weeds**

The treatment conditions damaging the crop plants. The changing climate in Australian's natural environment causes degradation of vegetation about 200 years over the vast area. The natural degrading of plant impacting the promoter effects on weeds, bad water quality, soil deteriorating, dry soil, loss of biodiversity, and variation are very suitable for weeds growing.

#### **Managing land**

If the land management practices are not good, then it fables weed to make colonies, badland probation can damage or reduce the competing vegetative ability of the crop to the invading species.

#### **Stressed conditions**

Non favorable and stressed environmental conditions lead to the drastic loss of competing potential of native crops, which are very beneficial to humans as food, i.e *cereal crops*. These extreme conditions are very suitable for weeds for invading. Acute conditions like

drought, floods, dry soil, hard soil, and acidic soil are countable in that category. Even some weeds are fire resistance, such as *Pennisetum* and *pampas grass*.

### **Impact of Weeds on Agricultural Land and Animals**

Weeds not only in words the native vegetation but also destroy the native habitat and threaten the native plants and animals too. Weeds affect the quality of the forest and crops (plants). The plus point for weed is that they aren't affected by disease and pest. Weeds are even not affected by environmental hazards. Weeds are grown faster than the commercial crops and cause economic loss for domestic annual plants. As described above, David reduced the productivity of vegetative farms, the field is smother pastures, and weed may be also harmful for livestock; foxtails (*Alopecurus spp.*) cause injury. Farmers related to agricultural land invest a large amount of their capital against the weeds' management. According to Australians agricultural establishments during 2004-2005, David's effects are about 73%, while the other comparative issues related to soil heart if 46% and only 36% deal with water issues. On humans, the weed, such as *parthenium weed*, cause respiratory problems specifically in children. Skin allergy symptoms are also noticed by some weeds' effects. Weeds also affect drinking water and create cases of asthma.

### **Weed Control**

There are many weed control managements which are practicing throw ideas. Some suggested herbicides fire control management and many other methods. But I supposed to tell you that best way of treatment is wheat prevention. As you know, prevention is more beneficial than curing. The same case is here, although it's the time taken and frequently require practice. But it is very useful and if the

wheat prevention is doing well, the results of production increase are noticeable. Some weeds prevention those I observed are given below:

1. Animals are the main source of wheat seed importing. So, when you are going to introduce the animal firstly, take a look for an isolating room in which animals are made for several days.
2. Animal feed must be pure, and it's not contaminated by weed seeds.
3. Before cultivation and broadcasting of seeds make sure that the crop seed is weed-less.
4. During preparation, keep the equipment clean first then used into your field especially when the practice is performed between the areas.
5. Make awareness about weeds to local farmers. Because formers are not well known about the drastic results of weeds over the production. They use a lot of fertilizer to increase the yield, but the competitors' weeds can consume all the nutrients and grow to invade over the crops. Weed in the wedding is the primary cause of food security, and it's an alarming situation.

### **CONCLUSION**

It is concluded that world is facing shortage of food so there is a need to use more advanced and efficient strategies for the production of food and to control the weeds with the aim to bring food for all. Moreover, there is a need to develop localized strategies and methods to control the weeds and ultimately increase production of crops. Furthermore, creating awareness about the alarming situation regarding losses made by weed and the need for the management of weed among farmers, policy makers and the intensive administrators is urgently needed.