

## ORDER 81: Re-engineering Iraqi agriculture

The ultimate war crime: breaking the agricultural cycle

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*Under the guise of helping get Iraq back on its feet, the US is setting out to totally re-engineer the country's traditional farming systems into a US-style corporate agribusiness. They've even created a new law - Order 81 - to make sure it happens.*

[Text of [Order 81](#)]

Coals to Newcastle. Ice to Eskimos. Tea to China. These are the acts of the ultimate salesmen, wily marketers able to sell even to people with no need to buy. To that list can now be added a new phrase - Wheat to Iraq.

Iraq is part of the 'fertile crescent' of Mesopotamia. It is here, in around 8,500 to 8,000BC, that mankind first domesticated wheat, here that agriculture was born. In recent years however, the birthplace of farming has been in trouble. Wheat production tumbled from 1,236,000 tons in 1995 to just 384,000 tons in 2000. Why this should have happened very much depends on whom you ask.

A press release from Headquarters United States Command reports that 'Over the past 10 years, this region has not been able to keep up with Iraq's wheat demand. During the Saddam Hussein regime, farmers were expected to continuously produce wheat, never leaving their fields fallow. This tactic degraded the soil, leaving few nutrients for the next year's crop, increasing the chances for crop disease and fungus, and eventually resulting in fewer yields.' For the US military, the blame clearly lies with the 'tactics' of 'Saddam's regime'.

However, in 1997 the UN's Food and Agriculture Organisation (FAO) found: 'Crop yields... remain low due to poor land preparation as a result of lack of machinery, low use of inputs, deteriorating soil quality and irrigation facilities' and 'The animal population has declined steeply due to severe shortages of feed and vaccines during the embargo years'. Less interested in selling a war perhaps, the FAO sees Iraqi agriculture suffering due to a lack of necessary machinery and inputs, themselves absent as the result of deprivation 'during the embargo years'.

Or it could have been simpler still. According to a 2003 USDA report, 'Current total production of major grains is estimated to be down 50 percent from the 1990/91 level. Three years of drought from 1999-2001 significantly reduced production.'

Whoever you believe, Iraqi wheat production has collapsed in recent years. The next question then, is how to get it back on its feet.

Despite its recent troubles, Iraqi agriculture's long history means that for the last 10,000 years Iraqi farmers have been naturally selecting wheat varieties that work best with their climate. Each year they have saved seeds from crops that prosper under certain conditions and replanted and cross-pollinated them with others with different strengths the following year, so that the crop continually improves. In 2002, the FAO estimated that 97 per cent of Iraqi farmers used their own saved seed or bought seed from local markets. That there are now over 200,000 known varieties of wheat in the world is down in no small part to the unrecognised work of farmers like these and their informal systems of knowledge sharing and trade. It would be more than reasonable to assume that somewhere amongst the many fields and grainstores of Iraq there are samples of strong, indigenous wheat varieties that could be developed and distributed around the country in order to bolster production once more.

Likewise, long before Abu Ghraib became the world's most infamous prison, it was known for housing not inmates, but seeds. In the early 1970s samples of the many varieties used by Iraqi farmers were starting to be saved in the country's national gene bank, situated in the town of Abu Ghraib. Indeed one of Iraq's most well known indigenous wheat varieties is called 'Abu Ghraib'.

Unfortunately, this vital heritage and knowledge base is now believed lost, the victim of the current campaign and the many years of conflict that preceded it. But there is another viable source. At the International Centre for Agricultural Research in Dry Areas (ICARDA) in Syria there are still samples of several Iraqi varieties. As a revealing report by Focus on the Global South and GRAIN comments: 'These comprise the agricultural heritage of Iraq belonging to the Iraqi farmers that ought now to be repatriated.'

If Iraq's new administration truly wanted to re-establish Iraqi agriculture for the benefit of the Iraqi people it would seek out the fruits of their knowledge. It could scour the country for successful farms, and if it miraculously found none could bring over the seeds from ICARDA and use those as the basis of a programme designed to give Iraq back the agriculture it once gave the world.

The US, however, has decided that, despite 10,000 years practice, Iraqis don't know what wheat works best in their own conditions, and would be better off with some new, imported American varieties. Under the guise, therefore, of helping get Iraq back on its feet, the US is setting out to totally reengineer the country's traditional farming systems into a US-style corporate agribusiness. Or, as the aforementioned press release from Headquarters United States Command puts it: 'Multi-National Forces are currently planting seeds for the future of agriculture in the Ninevah Province'

First, it is re-educating the farmers. An article in the Land and Livestock Post reveals that thanks to a project undertaken by Texas A&M University's International Agriculture Office there are now 800 acres of demonstration plots all across Iraq, teaching Iraqi farmers how to grow 'high-yield seed varieties' of crops that include barley, chick peas, lentils – and wheat.

The leaders of the \$107 million project have a stated goal of doubling the production of 30,000 Iraqi farms within the first year. After one year, farmers will see soaring production levels. Many will be only too willing to abandon their old ways in favour of the new technologies. Out will go traditional methods. In will come imported American seeds (more than likely GM, as Texas A&M's Agriculture Program considers itself 'a recognised world

leader in using biotechnology'). And with the new seeds will come new chemicals – pesticides, herbicides, fungicides, all sold to the Iraqis by corporations such as [Monsanto](#), Cargill and Dow.

Another article, this time in The Business Journal of Phoenix, declares: 'An Arizona agri-research firm is supplying wheat seeds to be used by farmers in Iraq looking to boost their country's homegrown food supplies.' That firm is called the World Wide Wheat Company, and in partnership with three universities (including Texas A&M again) it is to 'provide 1,000 pounds of wheat seeds to be used by Iraqi farmers north of Baghdad.'

According to Seedquest (described as the 'central information website for the global seed industry') WWWC is one of the leaders in developing proprietary varieties of cereal seeds – ie varieties that are owned by a particular company. According to the firm's website, any 'client' (or farmer as they were once known) wishing to grow one of their seeds, 'pays a licensing fee for each variety'.

All of a sudden the donation doesn't sound so altruistic. WWWC gives the Iraqis some seeds. They get taught how to grow them, shown how much 'better' they are than their seeds, and then told that if they want any more, they have to pay.

Another point in one of the articles casts further doubt on American intentions. According to the Business Journal, 'six kinds of wheat seeds were developed for the Iraqi endeavour. Three will be used for farmers to grow wheat that is made into pasta; three seed strains will be for breadmaking.'

Pasta? According to the 2001 World Food Programme report on Iraq, 'Dietary habits and preferences included consumption of large quantities and varieties of meat, as well as chicken, pulses, grains, vegetables, fruits and dairy products.' No mention of lasagne. Likewise, a quick check of the Middle Eastern cookbook on my kitchen shelves, while not exclusively Iraqi, reveals a grand total of no pasta dishes listed within it.

There can be only two reasons why 50 per cent of the grains being developed are for pasta. One, the US intends to have so many American soldiers and businessmen in Iraq that it is orienting the country's agriculture around feeding not 'Starving Iraqis' but 'Overfed Americans'. Or, and more likely, because the food was never meant to be eaten inside Iraq at all.

Iraqi farmers are to be taught to grow crops for export. Then they can spend the money they earn (after they have paid for next year's seeds and chemicals) buying food to feed their family. Under the guise of aid, the US has incorporated them into the global economy.

What the US is now doing in Iraq has a very significant precedent. [The Green Revolution](#) of the 1950s and 60s was to be the new dawn for farmers in the developing world. Just as now in Iraq, Western scientists and corporations arrived clutching new 'wonder crops', promising peasant farmers that if they planted these new seeds they would soon be rich.

The result was somewhat different. As Vandana Shiva writes in *Biopiracy* – the plunder of nature and knowledge: 'The miracle varieties displaced the diversity of traditionally grown crops, and through the erosion of diversity the new seeds became a mechanism for introducing and fostering pests. Indigenous varieties are resistant to local pests and diseases. Even if certain diseases occur, some of the strains may be susceptible, but others

will have resistance to survive.'

Worldwide, thousands of traditional varieties developed over millennia were forsaken in favour of a few new hybrids, all owned by even fewer giant multinationals. As a result, Mexico has lost 80 per cent of its corn varieties since 1930. At least 9,000 varieties of wheat grown in China have been lost since 1949. Then in 1970 in the US, genetic uniformity resulted in the loss of almost a billion dollars worth of maize because 80 per cent of the varieties grown were susceptible to a disease known as 'southern leaf blight'.

Overall, the FAO estimates that about 75 per cent of genetic diversity in agricultural crops was lost in the last century. The impact on small farmers worldwide has been devastating. Demanding large sums of capital and high inputs of chemicals, such farming massively favours large scale, industrial farmers. The many millions of dispossessed people in Asia and elsewhere is in large part a result of this inequity. They can't afford to farm anymore, are driven off their land, either into their cities' slums or across the seas to come knocking at the doors of those who once offered them a poisoned chalice of false hope.

What separates the US's current scheme from those of the Green Revolution is that the earlier ones were, at least in part, the decisions of the elected governments of the countries affected. The Iraqi plan is being imposed on the people of Iraq without them having any say in the matter. Having ousted Saddam, America is now behaving like a despot itself. It has decided what will happen in Iraq and it is doing it, regardless of whether it is what the Iraqi people want.

When former Coalition Provisional Authority administrator Paul Bremer departed Iraq in June 2004 he left behind a legacy of 100 'Orders' for the restructuring of the Iraqi legal system. Of these orders, one is particularly pertinent to the issue of seeds. [Order 81](#) covers the issues of 'Patent, Industrial Design, Undisclosed Information, Integrated Circuits and Plant Variety'. It amends Iraq's original law on patents, created in 1970, and is legally binding unless repealed by a future Iraqi government.

The most significant part of Order 81 is a new chapter that it inserts on 'Plant Variety Protection' (PVP). This concerns itself not with the protection of biodiversity, but rather with the protection of the commercial interests of large seed corporations.

To qualify for PVP, seeds have to meet the following criteria: they must be 'new, distinct, uniform and stable'. Under the new regulations imposed by Order 81, therefore, the sort of seeds Iraqi farmers are now being encouraged to grow by corporations such as WWWC will be those registered under PVP.

On the other hand, it is impossible for the seeds developed by the people of Iraq to meet these criteria. Their seeds are not 'new' as they are the product of millennia of development. Nor are they 'distinct'. The free exchange of seeds practiced for centuries ensures that characteristics are spread and shared across local varieties. And they are the opposite of 'uniform' and 'stable' by the very nature of their biodiversity. They cross-pollinate with other nearby varieties, ensuring they are always changing and always adapting.

Cross-pollination is an important issue for another reason. In recent years several farmers have been taken to court for illegally growing a corporation's GM seeds. The farmers have argued they were doing so unknowingly, that the seeds must have carried on the wind from

a neighbouring farm, for example. They have still been taken to court. This will now apply in Iraq. Under the new rules, if a farmer's seed can be shown to have been contaminated with one of the PVP registered seeds, he could be fined. He may have been saving his seed for years, maybe even generations, but if it mixes with a seed owned by a corporation and maybe creates a new hybrid, he may face a day in court.

Remember that 97 per cent of Iraqi farmers save their seeds. Order 81 also puts paid to that. A new line has been added to the law which reads: 'Farmers shall be prohibited from re-using seeds of protected varieties or any variety mentioned in items 1 and 2 of paragraph (C) of Article 14 of this Chapter.'

The other varieties referred to are those that show similar characteristics to the PVP varieties. If a corporation develops a variety resistant to a particular Iraqi pest, and somewhere in Iraq a farmer is growing another variety that does the same, it's now illegal for him/her to save that seed. It sounds mad, but it's happened before. A few years back a corporation called SunGene patented a sunflower variety with a very high oleic acid content. It didn't just patent the genetic structure though, it patented the characteristic. Subsequently SunGene notified other sunflower breeders that should they develop a variety high in oleic acid with would be considered an infringement of the patent.

So the Iraqi farmer may have been wowed with the promise of a bumper yield at the end of this year. But unlike before he can't save his seed for the next. A 10,000-year old tradition has been replaced at a stroke with a contract for hire.

Iraqi farmers have been made vassals to American corporations. That they were baking bread for 9,500 years before America existed has no weight when it comes to deciding who owns Iraq's wheat. Yet for every farmer that stops growing his unique strain of saved seed the world loses another variety, one that might have been useful in times of disease or drought.

In short, what America has done is not restructure Iraq's agriculture, but dismantle it. The people whose forefathers first mastered the domestication of wheat will now have to pay for the privilege of growing it for someone else. And with that the world's oldest farming heritage will become just another subsidiary link in the vast American supply chain.

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