**What Methods Do Andean Farmers Use?**

Public debate around climate change and its effects on agriculture tends to focus

on the large-scale industrial farms of the North. Farmers who work on a small scale and

use traditional methods have largely been **ignored**. However, as the world slowly comes

to terms with the **threat** of climate change, Native farming traditions will warrant
greater attention.

In the industrial model of agriculture, one or two crop varieties are grown over

vast areas. Instead of trying to use local resources of soil and water **optimally** and

sustainably, the natural environment is all but ignored and uniform growing conditions

are **<u>fabricated</u>** through large-scale irrigation and the intensive use of artificial fertilizers

and pesticides. For example, a **handful** of basically similar potato varieties, all of which

require nearly identical soil conditions, temperature, rainfall, and growing seasons,

account for almost all global production. When these global crops are no longer suited
to the environment in which they are grown, when their **resistance** to disease and pests

begins to fail, or the climate itself changes, the best way to rejuvenate the breeding
stock will be to introduce new genetic material from the vast diversity of crop varieties
still maintained by indigenous peoples.

In contrast to the industrial model, Andean potatoes and other Andean crops such

as squash and beans grown by Quechuan farmers exhibit **extraordinary** genetic
diversity, driven by the need to adapt crops to the extraordinary climatic diversity of the
region. Along the two axes of latitude and altitude, the Andes encompasses fully two-
thirds of all possible combinations of climate and geography found on Earth. The
Andean potato has been adapted to every environment except the depth of the
rainforest or the frozen **peaks** of the mountains. Today, facing the likelihood of major
disruptions to the climatic conditions for agriculture worldwide, indigenous farmers
provide a dramatic example of crop adaptation in an increasingly extreme environment.
More importantly, Native farmers have also safeguarded the crop diversity essential for
the future adaptations.

**1. What is the main idea of the first paragraph?**

A. Attention to Native farming practices will lead to greater awareness of the threat of climate change.

B. Popularity of small-scale farming in the North will lead to greater attention to Native farming practices.

C. Global demand for food will lead to increasing efficiency of large-scale farming in the North.

D. It will be worthwhile to include a greater focus on Native farming practices in public discussions concerning the threat of climate change.

**2. In the second paragraph, the information about potato-growing practices in the industrial model of agriculture serves to:**

A. give an example of a potential problem that Native farming practices could help to alleviate.

B. show the likely global consequences of a possible food shortage caused by industrial farming practices.

C. show how pests and disease are less effectively resisted by crops grown in the industrial farming model.

D. give an example of how public debate has had little effect on the agricultural practices of the North .

**3. The passage states that which of the following is true of the small number of potato varieties that account for most of the potatoes produced on Earth currently?**

A. They are grown in the Andean region.

B. They all require very similar soil and climate conditions.

C. They are no longer suited to their environment.

D. They are based on genetic material from crops developed by indigenous peoples.

**4. As it is used in the passage, the underlined word fabricated most nearly means:**

**A. woven.**

B. falsely stated.

C. fully clothed.

D. manufactured.

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| **Words** | **meanings** |
|---|---|
| Ignore (v) | best or most favorite |
| Threat (n) | very unusual , or remarkable |
| Optimal (adj) | refuse to take notice |
| Handful (n) | a thing likely to cause damage or danger |
| Resistance (n) | a quantity that fills the hand |
| Extraordinary (adj) | the ability not to be affected by sth. |
| Peak | top |