

## Task X

Read the text about the wild plant jatropha, then answer the questions (1-6) using a maximum of 4 words. Write your answers in the spaces provided on the answer sheet. The first one (0) has been done for you.

### New Energy Source for the Poor

Jatropha, a wild plant that grows well in dry areas on degraded lands and can be processed into biofuel, has potential as a low-cost energy source for poor farmers, according to a new United Nations report, which adds that further research is still needed on this crop.

The report by the Food and Agriculture Organization (FAO) and the International Fund for Agricultural Development (IFAD) notes that the seeds of the jatropha plant can be processed into lower-polluting biodiesel than fossil diesel to provide light and cooking fuel for poor rural families.

Seed cake, a by-product from this process, can be used as fertilizer and animal feed after detoxification, the agencies add.

Unlike other major biofuel crops, such as maize, jatropha is not used for food and it can be grown on marginal and degraded lands where food crops cannot grow, and animals do not graze on it.

The cultivation of jatropha – already used in countries such as Indonesia, Ghana and Brazil – would be particularly beneficial to women, the report points out, because milling machines powered by engines fuelled with jatropha oil reduce the amount of work they have to do.

Replacing traditional biomass cooking fuels with cooking stoves that run on jatropha oil is also healthier, as cooking is done in a smoke-free environment, and women do not have to spend time gathering fuel wood. In addition, the lower use of fuel wood relieves pressure on forest resources.

“As developing countries face increasing local demand for energy in rural areas, they also must deal with both economic and environmental pressure on agricultural lands in general,” the authors say.

“The possibility of growing energy crops such as *Jatropha curcas* L. has the potential to enable some smallholder farmers, producers and processors to cope with these pressures.”

At the same time, the report stresses that jatropha is still essentially a wild plant sorely in need of crop improvement, and that expecting it to substitute significantly for oil imports in developing countries is unrealistic.

It adds that many of the actual investments and policy decisions on developing jatropha as an oil crop have been made without the backing of sufficient science-based knowledge. "Realizing the true potential of jatropha requires separating facts from the claims and half-truths," states the report.

0	What are the processed seeds of the jatropha plant used for?
Q1	What must be done to seed cake before it can be used?
Q2	What advantage does jatropha have over other common biofuel sources? <i>Give <u>one</u> answer.</i>
Q3	How can growing jatropha help women? <i>Give <u>one</u> answer.</i>
Q4	How can jatropha help people on small farms? <i>Give <u>one</u> answer.</i>
Q5	Why can't jatropha be used on a large scale? <i>Give <u>one</u> answer.</i>
Q6	Why have recent attempts to increase the production of jatropha been problematic?

*Source: "UN agency highlights potential of jatropha plant as energy source for the poor".  
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**Answer Sheet :New Energy Source for the Poor**

0 *Producing (lower-polluting) biodiesel*

Q1 \_\_\_\_\_

Q2 \_\_\_\_\_

Q3 \_\_\_\_\_

Q4 \_\_\_\_\_

Q5 \_\_\_\_\_

Q6 \_\_\_\_\_

