"No one in Africa should ever go hungry."

https://worldrenew.net/our-stories/team/world-renew-staff-blog/no-one-africa-should-ever-go-hungry

Simple CC version with Jack beans

Cover crops that fertilise and protect the soil and provide food.

A Jack bean cover crop is first sown in order to fertilise depleted soil.
This is best done, if possible, **without ploughing** to minimise soil destruction due to its exposure to sunshine and/or heavy rain
The next season cereal crops can often be sown in the cover crop.

Cover crops effectively prevent weeds from growing and minimise pests and diseases in food crops.
Jack beans being noxious when mature deter both wandering animals and disease-producing pests such as Fall armyworm
Jack bean pods can be eaten raw when young but later need careful cooking - see below.

If Jack beans are unobtainable legumes such as Pigeon peas can be sown instead.
To avoid the need for ploughing a Simple Jabber can help – ask us for details.

Leguminous trees like Gliricidia should be sown/planted as soon as possible!

Jack beans with pods

Using a Simple jabber to sow seeds through soil cover.

It avoids ploughing and speeds sowing.

Jack bean seeds should be sown more than ½ metre apart to avoid overcrowding

Canavalia ensiformis, or jack bean, is a hardy crop with several useful properties.

“Like most legumes, jack bean contains various antinutritional compounds designed to make them unpalatable or toxic to pests and animals.
These chemicals, along with jack bean’s leguminous nitrogen fixing capabilities, can be advantageous for sustainable agriculture in that they are effective in repelling
pests from other crops while gradually improving soil quality.
Of all the beans that RAMA-BC uses, the jack bean is the most effective on both of these counts and also the hardiest, meaning it can be planted in conditions unfavourable to other beans while also surviving longer.
It is also more prolific, often producing two harvests for a single crop.
Its resistance to pests also means the harvest is not subject to post harvest losses from weevils, a major problem for other beans.
All of this makes jack bean an excellent food source as well, especially in periods of drought.
However, these same anti-nutritional compounds render the bean inedible to humans without special precaution:”
https://www.landolakes.org/getattachment/Resources/Success-Stories/Utilizing-jack-beans-in-Mozambique/RAMA-BC-Germination-as-an-Effective-Method-for-Processing-Jack-Bean-for-Human-Consumption.pdf

Jack beans can be germinated as follows: Soak beans for one day, then drain and wash them.
Continue to wash them morning and night until they have germinated and the sprouts are one inch long (this usually takes two to four days).
Finally, remove the seed coats—germination makes beans much easier to de-hull—and cook the seeds for 90 minutes.

Young jack bean pods can be eaten as a vegetable without any special precautions. Allen Voelkel wrote from Mexico, "I received approximately nine jack bean seeds. These I planted around the school. Some of the plants got destroyed, others were neglected but, year after year, the plants continued to pop up around the place. I was tremendously impressed by their resistance to drought. At the time, **they were the only green thing in sight for miles,** and they were one of the few plants that could withstand the ever devouring leaf-cutter ants. One of our workers took some of the seeds out to a community and showed a family how to plant and, then later, to prepare [the young pods] to eat. The family **loved** them, and they continue to grow them as a garden vegetable.
https://cdn.ymaws.com/members.echocommunity.org/resource/resmgr/a_to_z/azch11an.htm#AreJ

From Roland Bunch;
Where cattle roam free and CA plots are not protected, legumes that are resistant to cattle will have to be used. The best candidates for this situation include tephrosia (Tephrosia vogelii or T. candida) and jack beans (Canavalia ensiformis). Both of these legumes can be intercropped with maize and allowed to grow throughout the dry season. In particularly difficult situations, such as drought-prone areas or where the soil is highly depleted, or even on wastelands, jack bean is by far the best
It produces a large amount of biomass (though it does not control weeds as well as mucuna, lablab or runner beans) and usually grows clear through the dry season. It fixes around 240 kg N/ha/season in many situations and is highly resistant to drought, even when only a few weeks old.
It is also highly resistant to degraded soils, which makes it ideal for recuperating wastelands.
It can be associated with maize, sorghum, millet, or even cassava, as long as care is taken to use only the bushy type.
Jack bean has no other uses ?? (Bizarre GK!)
(though the long pod can be used as firewood), but after 2–3 years it can restore even the worst land to the point that other, more useful GMCC can be used.
file:///C:/Users/User/Downloads/npc3757%20(1).pdf

Also read;
https://www.landolakes.org/getattachment/Resources/Success-Stories/Utilizing-jack-beans-in-Mozambique/RAMA-BC-Germination-as-an-Effective-Method-for-Processing-Jack-Bean-for-Human-Consumption.pdf
See also;
https://plants.usda.gov/plantguide/pdf/pg_caen4.pdf
and
file:///C:/Users/User/Downloads/edn-issue-143%20(1).pdf

https://www.grainsa.co.za/upload/conservation-agriculture/eng/6-CA-manual-Chapter-5-Cover-crops.pdf

Video of smallholder CA with CC in South Africa;
https://www.youtube.com/watch?v=6wGBuReNSKc

http://advancedscholarsjournals.org/full-articles/f-jack-.pdf?view=inline

https://www.researchgate.net/publication/264872581_Some_Physical_Properties_of_Jackbean_Seed_Canavalia_ensiformis