Benefits of organic cotton agriculture

IMPACT Environmental	ORGANIC BENEFIT
Biodiversity	Increase of biodiversity due to less indiscriminate killing of bugs, varied crop production and use of local species as border crops.
Climate Change	Contribution to the mitigation of climate change by avoiding energy intensive mineral fertilizers and therefore minimizing the emission of the green house gas N20 from fields and increase of soil organic matter contents. Adaptation: Organic agriculture displays greater resistance to extreme climatic conditions.
Chemicals	No toxic and persistent chemicals permitted. Equating also to a farmer being a 'more responsible neighbour' e.g. no chemical spray drift, leaching to groundwater, contamination of surface water, etc.
Energy Use	No use of fossil fuels in inputs (besides use of machinery). Indirect energy (and carbon) savings through no imported, synthetic agrichemical inputs.
Seed Diversity	Since GM seed is not permitted in organic production it is more likely that seeds will vary between countries, states, growing areas, etc. It is also more likely that seeds will be saved and/or bred for specific growing conditions. More effort (including R&D) is required to keep non-GM, high performance seed available to farmers.
Soil	Organic uses natural, local materials for composting / soil maintenance & conservation. 'Low till' organic reduces soil erosion and acts as a carbon sink. Rotation and other crops help balance the nutrient demands of cotton.
Water	Water consumption: Organic is more likely to be rain fed, although irrigation is also used. Either way, organic is said to be less 'thirsty' than conventional cotton (in part due to the water holding capacity of organic soils); holding up to 30-50% more moisture than non organic. Less water contamination - no chemicals equates to no ground or surface water contamination. No excess chemicals leaching into groundwater, or contaminating surface water.

IMPACT Socio-economic	ORGANIC BENEFIT
Access to Finance	Ethical lending, rural investment, micro-finance more likely to target farmers or Producer Groups engaged in proven sustainable business and agricultural models (such as organic).
Cultural Diversity	NGO /funding 'projects' likely to target poorer / marginalised rural communities. Traditional techniques more likely to be used and local materials (plants etc) used for biological inputs. Access to local seed varieties / impacts cultural preservation and diversity. Skills and knowledge transfer between science communities and grower communities more likely.
Food Security	Community food security through the production of other food crops as part of the organic cotton farm system. Residue-free food crops grown as part of organic cotton system.
Gender	No pesticides means no exposure risk to mothers or pregnant women health, babies or unborn babies.Women often 'in charge' of food crops - organic cotton part of a food crop system. More likelihood of women having independent income (to spend on household and family needs).Females more likely to be in charge of farmer training, head producer groups or head up ICS (internal control systems). Role-models for girls.
Health and Safety	No chemical exposure for farmers and consumers since no toxic and persistent chemicals permitted. Less risk of accidental poisoning or suicide by poisoning.
Labour	Independent or 'associated' producer groups equates to fairer and more autonomous working conditions. Producer groups more likely to share skills, resources and labour. Child labour not raised as an issue - increased income leads to children attending school. No farmer suicides reported on organic farms.

Producer Organisation	Producer groups usually involve elective management and democratic decision making. This may even reach upstream in the value chain. Resources and skills are often shared. Community considerations and village needs often considered by Producer Group when it comes to spending profit.
Rural Economic Development	Reverses rural migration due to better incomes and job prospects. Higher status given to organic growers (as reported by Agrocel, India). Spin-off industries such as manufacturing biological pesticides (eg neem), locally produced green manure or value adding to farm system crops for domestic market eg drying fruit is encouraged. Growth of local food markets.
Sustainable Income	Premium on fibre price and reduced Input costs due to use of organic fertilisers. Depending on terms of contract more likely to include timely payment, guaranteed sales etc Increase of farmers' income due to organic premiums and reduced input costs Reduced vulnerability of farmers' livelihoods (by avoiding debts for the purchase of external inputs and by diversifying the farm through crop rotation and intercropping. Crop diversification leads to secondary income (esp. if one crop fails) and food security.
Wellbeing	Organic premium leads to more cash for educating children and health care and producer associations known to finance health care for farmers. Higher income leads to better quality housing (TE KPI research). No pesticides - no contamination of drinking water or residue in food crops.