

## Food and Agriculture Organization

### Strategies for Advancing Sustainable Agricultural Practices in the Green Transition

#### United States of America



The US is known to be the world leader in many aspects. These can be listed as: Defence, Science, Higher Education etc. This can be achieved through true innovation and a great foundation for those innovations to take place. In agriculture the same thing can be said in many ways. USA has been the largest producer of green corn (maize), almonds (in shell), blueberries between 1994 and 2022<sup>1</sup>. USA thinks that having a sustainable agriculture is the key to a better future and has implicated several methods to achieve that, but believes that new techniques should also be used which we will touch upon. If a sustainable agricultural system is not implemented, USA is aware that this can lead to pollution, poverty, climate change, waste of water, land degradation, and bad effects on human health. UN has launched several programs regarding sustainable agriculture like Sustainable Food and Agriculture (SFA) Framework<sup>2</sup>, Scaling up Agroecology Initiative<sup>3</sup>, Food and Agriculture Sustainable Transformation (FAST) Partnership<sup>4</sup> and so on.

As mentioned in the introduction part, USA supports farmers as it can be observed in the Farm Bill. The Farm Bill is a package of legislation passed roughly once every five years that has a tremendous impact on farming livelihoods, how food is grown, and what kinds of foods are grown<sup>5</sup>. USA also has sustainable agriculture policies that are applied through NIFA (National Institute of Food and Agriculture) that drastically

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<sup>1</sup> <https://www.fao.org/faostat/en/#data/QCL/visualize>

<sup>2</sup> <https://www.fao.org/sustainability/en/>

<sup>3</sup> <https://www.fao.org/agroecology/overview/scaling-up-agroecology-initiative/en/>

<sup>4</sup> <https://www.fao.org/food-agriculture-sustainable-transformation-partnership/en>

<sup>5</sup> <https://sustainableagriculture.net/our-work/campaigns/fbcampaign/what-is-the-farm-bill/>

help people associated with agriculture<sup>6</sup>. There also are education materials published through EPA(Environmental Protection Agency)<sup>7</sup>. Another major program of the US is SARE(Sustainable Agriculture Research and Education). SARE gives education to farmers regarding sustainable agriculture and has raised \$451 million since 1988 funding 9,497 projects<sup>8</sup>.

Other than programs held nationally, there are major agriculture companies based in USA that control the majority of the market internationally. Some examples are: Cargill, Archer Daniels Midland (ADM), Tyson Foods, Corteva Agriscience etc. The influence these companies have on international trade and development is nothing to be overseen as they majorly control wheat which holds vital value for essential nutrition.

USA has imposed several sanctions and embargoes on other countries regarding agriculture which has led to a major policy change in those countries since the US controls the majority of the market. Some examples to this are: Sanctions on Russia and Belarus after the start of the Ukrainian conflict<sup>9</sup>, sanctions on Cuba<sup>10</sup> and many more. This has led to countries changing their policies from relying on imports to producing locally and independently.

USA is and will be working towards a better system for sustainable agriculture. This means that USA is open to new innovations and technologies used in agriculture.

UN has taken agriculture seriously which can be observed by looking at their actions in the past. From hosting a conference on Food and Agriculture in 1943 to establishing 2016-2025 the Decade of Action on Nutrition<sup>11</sup>. This indicates that UN is working towards a future where sustainable agriculture is widely used by implicating new techniques and programs like Sustainable Development Goals (SDGs)<sup>12</sup>.

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<sup>6</sup> <https://www.nifa.usda.gov/grants/programs/sustainable-agriculture-programs>

<sup>7</sup> <https://www.epa.gov/agriculture/agriculture-and-sustainability>

<sup>8</sup> <https://www.sare.org/>

<sup>9</sup> <https://www.ifpri.org/blog/how-sanctions-russia-and-belarus-are-impacting-exports-agricultural-products-and-fertilizer/>

<sup>10</sup> <https://crsreports.congress.gov/product/pdf/R/R46791>

<sup>11</sup> <https://research.un.org/en/foodsecurity/un-milestones>

<sup>12</sup> <https://sdgs.un.org/topics/food-security-and-nutrition-and-sustainable-agriculture>

Since we are in an era of new technologies it can only be appropriate to use them. USA is taking actions to introduce and promote the usage of UAVs (Unmanned Aerial Vehicles) in the agricultural practices. This method will not only have benefits on the environment by eliminating Carbon emissions, it will also benefit the user with easier control methods and the possible usage of AI. AI models can be trained to detect pests, optimize water usage, estimate future crops and so on. This will not only be beneficial for the environment it will also be cost efficient in the long run. With AI being combined with UAVs it is safe to say that this is a revolution in agricultural practices. Some of the leading UAV manufacturer countries are USA, China, France, Türkiye<sup>13</sup>. However only two major companies specialize in agriculture. Those are AeroVironment and DJI. One of them being American (AeroVironment) and the other being Chinese (DJI)<sup>14</sup>. With a collaboration between USA and China this idea can very well be implemented.

Even though education is a classic solution for almost all problems, it is undeniably effective. As mentioned USA is working on educating farmers and others with the help of local education centers but, this is not the case for all countries. USA believes that even in the US this topic can be further emphasized on. A technique on how to improve education on sustainable agriculture can be opening education centers with the help of local universities. This will lead to a more controlled and a more organized work plan. As USA has the best universities in the world<sup>15</sup> this will not be a problem as long as private universities decide to cooperate. USA believes this is very well needed as the farmers will not be able to implement new techniques unless they decide to be educated about them.

Finally using new agricultural techniques that do not require much brain power can drastically improve the sustainability of agriculture throughout the World as they are easier to apply and work with. These techniques can be crop rotation, agroforestry, herbal fertilization and so on. USA believes that while these techniques have their benefits, it is almost a must to educate people on implementing them and new techniques.

Signed,  
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Delegate of the United States of America

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<sup>13</sup> [https://www.thedroneu.com/blog/top-drone-companies/#A\\_Drone\\_Hardware\\_Companies](https://www.thedroneu.com/blog/top-drone-companies/#A_Drone_Hardware_Companies)

<sup>14</sup> <https://www.mordorintelligence.com/industry-reports/agriculture-drones-market/companies>

<sup>15</sup> <https://www.topuniversities.com/world-university-rankings>