Kellogg recognizes that smallholder farmers play a critical role in global food supply, first for themselves and their families, but increasingly for broader food security opportunities in rural or impoverished communities. Kellogg recognizes the key role smallholder farmers play in food security in their communities and is assessing how our supply chain can improve productivity and livelihoods.

Kellogg also recognizes that women play a significant role in agriculture, but in some countries still face challenges of injustice and inequality. Kellogg is identifying the parts of our supply chain with the highest prevalence of women, while identifying the risks and opportunities they face, depending on their communities and regions.

Kellogg worked with TechnoServe, a nonprofit organization with deep expertise creating business solutions to poverty, to produce directional estimates of smallholder and female participation in Kellogg’s supply chain and to complete an analysis of risks to smallholder farmers and women in the markets and crops we source.

**Estimated Number of Smallholder Farmers and Women:**

Based on actual Kellogg sourcing volumes and locations, as well as discussions with procurement team members and suppliers, TechnoServe estimated that Kellogg supports 65,000 smallholder farmer livelihoods across 10 of our ingredients which include wheat, corn, rice, potato, fruit (berries and raisins/sultanas), palm oil, cocoa, honey and vanilla.\(^1\)

Across these 10 crops, TechnoServe estimated that women represent an average of 41% of workers on smallholder farms and 11% of farm managers/owners.

The following graphic provides representation of the estimated number of smallholder farmer livelihoods supported by Kellogg’s sourcing of its priority crops:

![Estimated number of equivalent smallholder livelihoods supported by Kellogg](image)

Source: TechnoServe analysis using Kellogg sourcing data and individual country production and smallholder data from FAO, World Bank, IFAD, USAID, WEF, APAARI and various country specific reports.

---

1 This smallholder estimate reflects the number of smallholder livelihoods supported by Kellogg if farmers were to sell their entire production into Kellogg’s supply chain (i.e. full farmer livelihood equivalent). In many regions, smallholders are likely to sell a small portion of their total production into our supply chain; in these cases, our sourcing may ultimately touch an even larger number of smallholders than this estimate.
Estimated Number of Smallholder Farmers by Country:

Kellogg’s top smallholder farmer sourcing countries span Asia and Africa. However, in Latin America Kellogg has a higher reliance on commercial farmers, which results in very low smallholder farmer numbers in comparison to Asia. The following graphic provides representation of the estimated number of smallholder farmer livelihoods by country and crop that are supported by Kellogg’s sourcing of these priority crops:

![Bar chart showing estimated number of smallholder farmers by country and crop.](image)

Source: TechnoServe analysis using Kellogg sourcing data and individual country production and smallholder data from FAO, World Bank, IFAD, USAID, WEF, APAARI and various country specific reports. *Represents possible number of smallholders based on anticipated, rather than current, sourcing volumes.

Risk Assessment Analysis:

Smallholder farmers and women in Kellogg’s supply chain face a number of risks across economic, social and environmental dimensions.

- Sustainability risks across economic, social and environmental dimensions can vary by type of farmer (i.e. commercial vs. smallholder), crop and geography; this assessment focuses on specific risks to smallholders. Smallholders commonly face numerous risks, including but not limited to:
  - **Small share of export price** due to low quality levels and limited market linkages
  - **Low productivity levels** due to lack of knowledge of good agronomic techniques and limited access to credit, inputs, proper storage, etc.
  - **High vulnerability to climate change** due to limited access to resilient inputs and climate change adaptation practices
  - **Loss of land rights** under unclear or unenforced land tenure systems
  - **Unsustainable cultivation and land conversion practices**, as smallholders often rely on slash and burn agriculture and exploitation of new land in the face of declining soil productivity, due to limited knowledge of sustainable practices and conservation agriculture
The following graphic provides representation of levels of risk across economic, social and environmental dimensions for smallholder farmers for the priority crops which Kellogg sources:

Smallholders in Kellogg’s supply chain face a number of risks across economic, social and environmental dimensions

<table>
<thead>
<tr>
<th>ECONOMIC</th>
<th>SOCIAL</th>
<th>ENVIRONMENTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farmer share of export price</td>
<td>Smallholder productivity</td>
<td>Geo-political volatility</td>
</tr>
<tr>
<td>Workers rights</td>
<td>Child labor</td>
<td>Land rights</td>
</tr>
<tr>
<td>Water use</td>
<td>Cultivation/ processing practices</td>
<td>Land conversion</td>
</tr>
</tbody>
</table>

- Social and environmental risks are largely concentrated in sugarcane, palm oil and cocoa
- Economic and women’s empowerment risks are greatest in grains and potato

Sources: TechnoServe analysis using WWF Guide to Responsible Commodities Sourcing; IFAD Smallholder Report; US Bureau of Labor; EPA

By 2020, Kellogg is committed to help increase adoption of climate-smart agriculture practices for 15,000 smallholder growers in communities from which we source, helping to improve their livelihoods and climate resiliency. The commitment will enable improved productivity of smallholder farmers in ingredients within Kellogg’s agricultural supply chain, with a focus on rice, and support the reduction of greenhouse gas emissions.

Using the results from the impact assessment to further guide our work, Kellogg will continue to identify, develop and implement programs, including crop diversification, seed variety and quality, water access and efficiency, fertilizer access and efficiency, crop protection, mechanization as well as post-harvest loss, which enable smallholder farmers, including women, to improve their livelihoods through agronomic practices and improved business skills. Kellogg recognizes that farmer organizations can play a key role in supporting smallholder farmers, and that stable and long term business commitments are important for smallholder farmers.

We will also continue to identify and develop programs to provide resources and education that improve the livelihoods of women farmers/workers, their families and their communities, supporting challenges and issues such as access to inputs, markets, or training, access to land, land use and land tenure, various climate change challenges, as well as access to clean and potable water.