Regenerative Practices on Land across 5 select projects (Cumulative as of 31st December 2022)

**Cover Crops**
- Cover crops can increase soil health and decrease GHG emissions
- 36k Ha
- Using cover crops to date
- 566 farmers
- Planting cover crops to date

**Water Management**
- Practices that save water and decrease methane emissions
- 6k Ha
- With new water management to date
- 156 farmers
- Using new water management to date

**Buffer Zones**
- Margin banks can increase biodiversity and protect local water sources.
- 600 Ha
- With newly grown buffer zones
- 4 farmers
- Planting margin banks to date

**Total Land**
- 44k Ha
- Land being regenerated
- 700 farmers
- Using regenerative practices

*These results are aggregated across the five-impact generating regenerative agriculture projects. They are cumulative from the start of each project to 31st December 2022.*
Greenhouse Gas (GHG) Emission Reductions

Regenerative agriculture practices can help to both reduce and remove greenhouse gas (GHG) emissions. This data is collected through carbon calculators for farmers, such as Cool Farm Tool or Fieldprint Calculator. These results are for GHG emission reductions only, not removals.

<table>
<thead>
<tr>
<th>Crop</th>
<th>Project Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soybeans, USA, Hellmann's Mayonnaise</td>
<td>In 2022, farms in the Hellmann’s Soy project in Iowa, USA had on average 1% less GHG emissions (Kg CO2 e) per hectare compared to comparison fields. The farmers reduced their GHG emissions by using less fertilizer (which also reduced their costs). See next slides for further outcomes of this project. In partnership with supplier ADM &amp; PepsiCo.</td>
</tr>
<tr>
<td>Rice, USA, Knorr Sides Quick Cooking Rice</td>
<td>In 2022, farms in the Knorr Rice project in Arkansas, USA had on average 48% less GHG emissions (Kg CO2 e) per kg rice compared to before the project. The farmers reduced their GHG emissions by reducing the methane that come from flooding rice fields. The conventional way of flooding rice fields produces a lot of methane, the alternative methods now used by the farmers produce lower levels of methane. In partnership with supplier Riviana.</td>
</tr>
<tr>
<td>Tomatoes, Spain, Knorr soups and sauces</td>
<td>In 2022, farms in the Knorr-Agraz Tomato project in Spain had on average 37% less GHG emissions (Kg CO2 e) per kg tomatoes compared to before the project. The farmers have reduced their GHG emissions by using less energy for irrigation and less fertilizer (which also saved costs). This also increased yield. In partnership with supplier Agraz.</td>
</tr>
</tbody>
</table>
Knorr Rice 2022 project results (Arkansas, USA)

Knorr, Supplier Riviana and University of Arkansas (UARK) have developed a project in Arkansas, USA on the rice supply chain, with the objective to regenerate the water reserve by preserving water during rice irrigation and decrease the methane emissions caused by focused water management.

The baselines are rolling baselines. This means that every year when a new field or farmer joins the project, a baseline is taken for that field or farmer. The means that as the group of fields in the project changes every year, so does the relevant baseline. Data was collected from all farmers.

Methane emissions 2022 vs baseline (average across all project farmers)

GHG emissions reductions 2022 vs baseline (average across all project farmers)

Farmers that implemented new practices (cumulative 2021-2022)

9

Hectares under water improved management (cumulative 2021-2022)

3,291
Knorr Rice 2022 project results from trial farms (Italy)

Knorr, Supplier Parboriz, and Innovatech developed a project in Italy within our rice supply chain, with the objective to reduce water pollution, reduce GHG emissions and have a positive impact on biodiversity. The project started in 2022. Four demonstration farms were set up to test out the planned regenerative agriculture methods. In 2023 these will be scaled up and applied by over 200 other rice farmers in the area.

<table>
<thead>
<tr>
<th>Hectares being regenerated</th>
<th>Demonstration farms</th>
<th>Farmers enrolled for 2023</th>
</tr>
</thead>
<tbody>
<tr>
<td>900</td>
<td>4</td>
<td>233</td>
</tr>
</tbody>
</table>

The new practices on the demonstration farms decreased the amount of chemical residue found in water entrance, centre of the field, and water exit. Water samples were taken from the demonstration field in 2022, after the regenerative agriculture practices were applied on the fields. They are compared to samples taken from a comparison field that did not apply the regenerative agriculture practices.

- Pesticide residue: -78% mg per litre in water body
- Herbicide residue: -62% mg per litre in water body
- Fungicide residue: -78% mg per litre in water body

*A demonstration farm, or model farm, is a farm which is used to research or demonstrate various agricultural techniques.
The rainfall in the tomato crop region of Badajoz, Spain, has decreased over the years which has an impact on the water directly absorbed by the crop and available from the underground water regions. Knorr has implemented a project with their tomato paste supplier, Agraz, to help the tomato farmers in the region to overcome this climate risk by using precision irrigation, cover cropping, and organic fertilizer. Baselines are from 2020.

**Knorr Tomato 2022 project results (Spain) 1/2**

- Hectares under improved water management (cumulative 2021-2022): 1,892
- Farmers that implemented new practices (cumulative 2021-2022): 147
- Buffer zones increase amount of pollinators in comparison to control fields (2022): 173%

**Soil Organic Matter 2020-2022** (average across all project farmers)

<table>
<thead>
<tr>
<th></th>
<th>Baseline (2020)</th>
<th>2021</th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average</td>
<td>1%</td>
<td>1.19%</td>
<td>1.27%</td>
</tr>
</tbody>
</table>

**Nitrogen fertilizer use 2022 vs baseline** (average across all project farmers)

<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average</td>
<td>2.4</td>
<td>1.9</td>
</tr>
</tbody>
</table>

**GHG emissions reductions 2022 vs baseline** (average across all project farmers)

<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th>2021</th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average</td>
<td>0.035</td>
<td>0.028</td>
<td>0.022</td>
</tr>
</tbody>
</table>
The project has helped tomato farmers to extend natural habitat boundaries (3 farmers) and grow cover crops (22 farmers) on their farms. These activities have correlated with an improvement in biodiversity. Species **diversity** is the number of different types of species. E.g., In 2022, there were 33% more different types of plants found on the project fields in comparison to a control field. Species **abundance** is the number of plants/insects. E.g., In 2022, there were 100% more pollinators found on the project fields in comparison to a control field.

**Results from small trial of natural habitat boundaries (2 farmers)**

- **Average Wild plant diversity on fields with natural habitat boundaries in comparison to control fields (2022)**: 27%
- **Average indicator plant species diversity on fields with natural habitat boundaries in comparison to control fields (2022)**: 33%
- **Average Pollinator abundance in comparison to control fields (2022)**: 173%

**Results from small trial of cover crops (22 farmers, 135ha)**

- **Average Wild plant diversity on fields with cover crops in comparison to control fields (2022)**: -36%
- **Average natural pest predator diversity on fields with cover crops in comparison to control fields (2022)**: 33%
- **Average natural pest predator abundance on fields with cover crops in comparison to control fields (2022)**: 100%
Since 2018 Hellmann’s has been working with Practical Farmers of Iowa, PepsiCo and soybean Supplier ADM to increase the use of cover crops to protect the soil used to grow the soybeans for soybean oil used in Hellmann’s mayonnaise. A third of USA Regular Hellmann’s jars now contain soybean oil from soybeans grown on project farms.

<table>
<thead>
<tr>
<th>Hectares with cover crops (2022)</th>
<th>Farmers enrolled (2022)</th>
<th>Farmers that implemented new practices (2022)</th>
<th>Nitrate levels in run-off water compared to comparison fields (2022)</th>
</tr>
</thead>
<tbody>
<tr>
<td>35k</td>
<td>624</td>
<td>523</td>
<td>-14%</td>
</tr>
</tbody>
</table>

Average GHG emissions reductions compared to comparison fields (2019-2022 four year average across sample of farmers n=70)

<table>
<thead>
<tr>
<th>Kg Co2 per hectare</th>
<th>Kg Co2 per 1kg soya</th>
<th>Mg l-1</th>
</tr>
</thead>
<tbody>
<tr>
<td>-6%</td>
<td>-4%</td>
<td>-14%</td>
</tr>
</tbody>
</table>

Proportion of USA Hellmann’s made with soya beans from project fields (2022)

34%*

*As of 2022 Q3 end