



**UN JOINT PROGRAMME EUROPEAN UNION INNOVATIVE ACTION FOR PRIVATE SECTOR COMPETITIVENESS IN GEORGIA (EU IPSC)  
ANNUAL PROGRAMME NARRATIVE PROGRESS REPORT  
REPORTING PERIOD: 1 JANUARY – 31 DECEMBER 2020**

<b>Programme Title &amp; Project Number</b>
<p>Programme Title: UN Joint Programme European Union Innovative Action for Private Sector Competitiveness in Georgia (EU IPSC) Programme Number ENI/2018/401-351</p> <ul style="list-style-type: none"> <li>MPTF Office Project Reference Number: 00114145</li> </ul>
<b>Participating Organization(s)</b>
<ul style="list-style-type: none"> <li>Organizations that have received direct funding from the MPTF Office under this programme</li> </ul> <p><i>UNDP, UN FAO, IOM and UNIDO</i></p>
<b>Programme/Project Cost (US\$)</b>
<ul style="list-style-type: none"> <li>Total approved budget as per project document:</li> <li>Agency Contribution (by Agency)</li> <li>EU USD 5,693,500</li> <li>UNDP USD 80,000</li> <li>FAO USD 50,000</li> <li>UNIDO USD 20,000</li> </ul> <p><b>TOTAL: USD 5,843,500</b></p>
<p><b>Programme Assessment/Review/Mid-Term Eval. – NA</b></p>

<b>Country, Locality(s), Priority Area(s) / Strategic Results</b>								
<p><i>Country/Region: Georgia/Kakheti and Imereti</i></p>								
<p><i>Priority area/ strategic results</i></p> <p><b><i>Business sophistication, innovation and entrepreneurship</i></b></p>								
<b>Implementing Partners</b>								
<p>National counterparts (government, private, NGOs &amp; others) and other International Organizations</p> <p>Ministry of Economic and Sustainable Development (MoESD) and its agencies Enterprise Georgia, Georgian Innovations and Technology Agency, the Ministry of Environmental Protection and Agriculture and its agency Scientific Research Centre and the Diaspora Relations Department Ministry of Foreign Affairs.</p>								
<b>Programme Duration</b>								
<table border="1"> <tr> <td>Overall Duration (months) <i>4 Years</i></td> <td></td> </tr> <tr> <td>Start Date:(<i>dd.mm.yyyy</i>)</td> <td><i>1 February 2019</i></td> </tr> <tr> <td>Original End Date (<i>dd.mm.yyyy</i>)</td> <td><i>31 January 2023</i></td> </tr> <tr> <td>Current End date (<i>dd.mm.yyyy</i>)</td> <td><i>31 January 2023</i></td> </tr> </table>	Overall Duration (months) <i>4 Years</i>		Start Date:( <i>dd.mm.yyyy</i> )	<i>1 February 2019</i>	Original End Date ( <i>dd.mm.yyyy</i> )	<i>31 January 2023</i>	Current End date ( <i>dd.mm.yyyy</i> )	<i>31 January 2023</i>
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<b>Report Submitted By</b>								
<ul style="list-style-type: none"> <li>Name: George Nanobashvili</li> <li>Title: Economic Development Team Leader</li> <li>Participating Organization (Lead): UNDP</li> <li>Email address: <a href="mailto:george.nanobashvili@undp.org">george.nanobashvili@undp.org</a></li> </ul>								



## LIST OF ABBREVIATIONS

RDA	Rural Development Agency
CAC	Conformitas Agraria Communitatis
CMO	Cluster Management Organization
CMT	Cluster Management Team
DCFTA	Deep and Comprehensive Free Trade Agreement
EPR	Extended producer responsibility
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
IOM	International Organization for Migration
MEPA	Ministry of Environmental Protection and Agriculture
MoESD	Ministry of Economic and Sustainable Development
NFA	National Food Agency
SRCA	Scientific Research Centre of Agriculture
PRO	Producer Responsibility Organization
UNDP	United Nations Development Programme Georgia
UNIDO	United Nations Industrial Development Organization
PMAG	Packaging Manufacturers' Association of Georgia

## EXECUTIVE SUMMARY

The reporting period covers the second year of the UN Joint Project. UN agencies performed activities to strengthen the overall competitiveness of the Georgian private sector through cluster development means. The United Nations Industrial Development Organization (UNIDO) conducted three cluster diagnostic studies and organized capacity-building training on diagnostics and action planning for clusters.

The United Nations Development Programme (UNDP) and the Food and Agriculture Organization of the United Nations (FAO) undertook cluster development actions in the packaging and seeds and seedling sectors. The International Organization for Migration (IOM) developed database and information channels for Georgian emigrants, thus supporting their integration into the Georgian economy.

In the reporting period, UNIDO formally validated the agribusiness and manufacturing clusters mapping report, which was followed by the selection of eight clusters for Cluster Diagnostic Studies. The selection was conducted in consultation with the Ministry of Economic and Sustainable Development (MoESD) and the Ministry of Environmental Protection and Agriculture (MEPA). Subsequently, UNIDO conducted three cluster diagnostic studies (each the



first of its kind) for Marine fishing (Samegrelo-Zemo Svaneti region); for the pharmaceutical sector, with a focus on bacteriophages and herbal products (Tbilisi); and for processing fruits and vegetables with a focus on hazelnuts (Samegrelo-Zemo Svaneti region). The studies were prepared according to the UNIDO cluster development methodology. A combination of approaches were deployed for conducting the diagnostic studies, including a review of relevant documents, secondary data sources, individual interviews and focus group meetings with key stakeholders.

UNIDO also conducted capacity-building training on the cluster development approach with a focus on diagnostics and action planning for sustainability for representatives from various public and private institutions. The training introduced the cluster concept, presented the UNIDO cluster methodology, explained the rationale for cluster diagnostic studies, provided details of the cluster capacity building and discussed gender mainstreaming in cluster development.

UNDP supported the packaging sector value chain through various channels, such as working through associations, clusters, providing trainings, a consultancy to address key bottlenecks and direct engagement with various actors. The overall aim of this assistance is to strengthen the sophistication and employment of effective and responsible business practices in the packaging production and service sectors, thus boosting the country's trade potential (particularly in import substitution and export development).

The packaging cluster formed through the PMAG Packaging Cluster initiative (under the Packaging Manufacturers Association of Georgia, hereafter PMAG), was relatively weak in its first year. Weaknesses included managerial capacity, membership and regional coverage. UNDP responded by strengthening the Cluster's managerial capacities, widening its scope of operations, commencing new initiatives to integrate companies and expanding membership and regional reach.

PMAG is a young, sectorial association founded by eight packaging companies. In 2019, it assumed the role of cluster management organization (CMO) for the Imereti, Kakheti and Tbilisi regions. During 2020, PMAG, through UNDP support, undertook actions and created synergies through cooperation, tailor-made support to identified cluster development needs, inter-firm cooperation, inter- and intra-cluster cooperation and others. **In 2020, membership in the Packaging Cluster reached 37 members (up from 8 members in 2019);** 18 are full members from core packaging manufacturers (there were eight full members by 2019), and 19 associate members (this membership level was new in 2020).

PMAG Packaging Cluster integrated an **upstream and downstream packaging value chain** on the domestic market, with already-built relationships with local and international packaging clusters. PMAG Packaging Cluster has begun executing its initial 2020-2023 strategy; its mission is to support the packaging industry and individual members enhance competitiveness, to scale up through collaborative synergies across the value chain and to promote



environmentally friendly practices and workplace safety. Significant attention was dedicated to mitigating the negative affects of the COVID-19 pandemic on cluster members and on the packaging value chain in general. Members benefited from accessing industry knowledge and networks, leveraging collaborative efforts and being on the cutting edge of the industry.

PMAG Packaging Cluster has been integrated in major international platforms, both sector and cluster wise, specifically, membership in **World Packaging Organization** and **European Cluster Excellence Initiative**, the first major hub for packaging technological transfer and the second hub for general cluster development and cooperation.

UNDP implemented packaging sector studies, generating evidence on two dimensions: the specific impacts of the pandemic on packaging value chain companies, and companies' strategic development needs (including green economy promotion). **UNDP developed knowledge products, such as:**

- Impact of the coronavirus pandemic on the packaging supply chain in Georgia.
- Road to Biodegradable Packaging in Georgia.
- EU experience in establishing producer responsibility organizations (PROs);
- Models for the packaging sector.
- Mapping of regulations under revision or to be introduced that affect the packaging sector (legislative approximation roadmap according to EU Association and DCFT Agreements); and
- Production, import and use of plastic and biodegradable bags in Georgia – legislation review and analysis.

Specific actions have been undertaken to improve the competitiveness of the packaging supply chain and to **develop cluster management organization in packaging in key areas, like:**

- Development of grant scheme (investment for growth for packaging value chain companies);
- Capacity-building programme to strengthen cluster management organization and member companies in key desired topics (based on soft and technical analyses on training and investment needs in the sector).
- Specific recommendations and implementation support for CMO development on PMAG Packaging Cluster strategy and its implementation improvement.
- Development of a business plan for the PMAG Packaging Cluster.
- Development of the CMO's organizational structure, including its corporate governance system, the allocation of responsibilities and functions and the delegation of authority;
- Development of a legal framework for cluster management organization; and Buyer group initiative to promote inter-firm cooperation, inter-cluster linkages and the internationalization of the packaging cluster.



For the seed/seedling sector, within the reporting period, FAO supported the **establishment of the Georgian Seed and Saplings Association** (hereby referred to as ‘the Association’ or ‘GEOSSA’) and its development to become a key actor within the sector. The Association will work towards increasing the nurseries’ competitiveness and sophistication by consolidating resources and efforts at the disposal of members. In addition, the Association will act as the CMO for the seed and saplings sector, bringing together sector stakeholders and enhancing sector competitiveness through mutually beneficial joint initiatives. In this sense, the project team **consolidated efforts towards establishing the Seeds and Saplings Cluster**.

FAO conducted a sector diagnosis study that provides an entry framework and a snapshot of the existing business environment. The snapshot includes current opportunities and threats and the cluster’s advantages and disadvantages. A cluster development strategy has been developed to identify potential cluster members (including supporting industries and the extended value chain) and possible points of inter-firm collaboration.

Responding to the need for public-private dialogue, a multi-stakeholder platform has been launched to facilitate regular private-public dialogue to discuss regulatory issues and to identify trends and challenges in agriculture practices applied to nurseries, sector needs, and the potential use of new varieties or new agriculture practices to address those needs. The platform includes representatives from the industry, farmers, the government and other key sector stakeholders.

Parallel to the importance of the sector’s inter-collaborative and organizational dimension, the production of safe, quality and traceable planting material and the improvement and expansion of domestic production is essential for the development of sector competitiveness. An important milestone for the project and the sector is the already ongoing **establishment of a certification system** that will improve phytosanitary conditions and that will approximate the vegetative material to European standards, thus raising its trustworthiness on the local and global markets and bolstering the growth of Georgian exports. The legislative approximation is the cornerstone of trade relations between Georgia and the EU, creating the basis for establishing regulatory equivalence. In this regard, the certification-related legislative framework aligned to the EU is being created. A new **Decree on Nursery Qualification** has been drafted and submitted to the government for endorsement. All related by-laws and technical regulations for the sapling sector (including fruit trees, berries and grape vines) will follow. FAO is working very closely with nurseries (mainly through GEOSSA) in order to facilitate the process by which they will be able to come into compliance with the new requirements. In addition, FAO is providing nurseries with technical support in the form of trainings and technical advice.

New management and marketing rules must be accompanied by an efficient public inspection and control system. Technical support is being provided to key actors (the National Food Agency (NFA), the Scientific Research Centre of Agriculture (SRCA) and the Laboratory of the Ministry of Agriculture (LMA)) in order **to reinforce their capacities to perform their respective certification responsibilities**.



The availability of pre-basic material (e.g. cultivars or rootstocks) is crucial for the functioning of the whole system. For this reason, SCRA is being supported on the maintenance of the **National Repository** in order to ensure proper genetic conservation of the material and its freedom from pests. Two screen houses have been installed on SRCA premises, and related technical trainings for their management have been carried out to reinforce staff capacities. Healthy and true-to-type vegetative material has been provided for a comprehensive support to keep the National Collection. This will ensure not only the maintenance of varieties endemic to Georgia, but also will provide a source of quality planting material available for nurseries.

In the reporting period, 2,168 individual profiles of diaspora professionals and businesspersons were developed and registered in the project's established diaspora inventory. The registered diaspora were contacted; 283 persons responded with cooperation interest. 215 persons filled out an online survey form that was sent to all outreached diaspora individuals; the overwhelming majority (almost 90%) of the respondents indicated their interest in doing business, taking short assignments or being employed remotely with a Georgian company.<sup>1</sup> Based on the diaspora stated interest on working or doing business in Georgia, IOM started planning for the diaspora economic forum. A short concept note of the forum, with an overview of the thematic sessions was shared with diaspora in June-July 2020 for their feedback.<sup>2</sup>

In line with IOM's consultative multi-stakeholder approach, IOM planned the economic forum through close consultation and coordination with project partners and a broader group of stakeholders, including government agencies; UNDP, FAO and UNIDO; other international organizations; finance institutions; and private-sector entities. Agencies were requested to present their MSME support programmes and related services during the planned event and to be engaged in the follow-up diaspora networking process.<sup>3</sup>

To benefit from the professional experiences and capacities of the diaspora, 86 diaspora profiles were shared with UNDP and FAO in order to match the gaps and needs of CMOs and businesses. After discussions with FAO, one remote assignment will be granted to a diaspora representative for the development of an online register for national seeds and planting materials, and a general register of nurseries and seeds producers operating in Georgia.

Meetings with regional and local authorities in the Imereti and Kakheti regions were organized to discuss the planned diaspora forums for 2020. IOM also organized workshops on 4-6 February 2020 for staff of the Kakheti municipalities and village/community representatives on mainstreaming migration into local development plans and programmes and on increasing their understanding of diaspora/migrants' potential for local development. The workshops were conducted in all the Kakheti municipalities. The workshops were attended by 96 persons (27% of whom were women). The diaspora web portal was presented to regional and local authorities during the meetings and trainings and to diaspora during the outreaches. The portal was

<sup>1</sup> Annex: IOM Diaspora Online Survey

<sup>2</sup> Annex: IOM Diaspora Forum Concept Paper

<sup>3</sup> Annex: IOM Forum Preparation meetings



technically upgraded as required and regularly updated with information of potential interest to the diaspora.

## I. Purpose

The JP aims to Enhance entrepreneurship and business sophistication by strengthening the capacities of government and local entities to develop and operate clusters and supporting companies directly with strategic investments while also demonstrating the effectiveness of these strategies to businesses. The participating UN Agencies will work to realize the four key results/outputs in order to reach this outcome.

1. Strengthened capacities of policymakers to identify clusters and support the establishment of SME clusters (Implementor UNIDO).
2. Developed pilot clusters for the two sectors of packaging and seeds/seedlings through the support of cluster management organizations (Implementor: UNDP Georgia – Packaging, FAO – Seeds/Seedlings).
3. Development and support of strategic investments in companies deemed necessary to improve the cluster. (Implementor: UNDP Georgia).
4. To Enhance the ability of national and local-level institutions and businesses to identify and connect with diaspora for the purpose of sector development, skill transfer and financing. (Implementor: IOM).

## II. Results

### 1. Strengthened capacities of policymakers and other stakeholders to identify and develop clusters (UNIDO):

At the Outcome level, one of the *indicators* is *the number of identified potential clusters (baseline – 0, target by 2022 – 10)*. UNIDO identified 57 emerging and potential clusters in manufacturing, agribusiness, and primary agriculture in 2019 and validated findings in 2020, thus, successfully *reaching one of three major indicators of the UNJP*. At this stage, it is too early to measure the contribution of UNIDO activities to other outcome level indicators.

### 2. Development and functioning of the clustering approach in the packaging and seeds/seedlings sectors:

#### a. Packaging Sector (UNDP):

In the first year of the project, **PMAG assumed the role of CMO. The PMAG executed its role during 2020.** The CMO undertook actions to direct the planning, implementation, daily management and coordination of activities and services based on in-cluster cooperation and networking. Cluster initiative members overcame their initial scepticism and welcomed the CMO model and new services that meet their identified needs and expectations. Needs were identified through assessments, surveys and analysis during the first year of the project. The cluster management team (CMT) delivered the most-needed services by transforming this analysis into a continuous process and everyday routine. The project provided local and international experts to support PMAG in institutional capacity building.



The UNDP project team focused on strengthening PMAG and member capacities, expanding membership, increasing regional coverage and constantly checking on the challenges and expectations of packaging-sector companies.

With the overall aim of helping cluster management organization and member companies in the packaging value chain in Georgia become more innovative and aware of their potential, **UNDP has:**

- Developed and supported implementation the **PMAG Packaging Cluster Strategy**;
- Devised a **Business Plan** for the PMAG Packaging Cluster and the **CMO's organizational structure**, Allocated responsibilities and functions; Delegated authorities and corporate governance system;
- Established a **legal framework for the CMO** and the **buyer group initiative**; and
- Made recommendations on **inter-firm cooperation of the packaging cluster**.

In the future, the PMAG Packaging Cluster will continue to prioritize strengthening market positions, applying good business models, promoting environmentally friendly approaches, making technological advancements and entering new markets.

UNDP's support for the development of services has increased interest in the cluster, thereby expanding the cluster's sustainability and its potential to benefit the sector.

The PMAG Packaging cluster **improved networking, coaching and business diagnostics** (mostly via remote online meetings due to the pandemic). Companies involved in the activities, particularly those that were involved in the early days, started understanding together with quick returns, the importance of medium- and long-term perspective of the sector, with new members remains perception of the cluster added value through their own benefits, with some exceptions and not necessarily through the overall sector impact. **UNDP Actions that were commenced (and that will be continued next year) in the packaging sector include:**

- Providing studies and trainings to address common needs.
- Writing semi-annual sector outlook reports;
- Conducting downstream and upstream supply chain development studies and discussions.
- Implementing capacity development programmes for managerial and production-level staff.
- Performing member company gap analysis to comply with certification requirements.
- Taking measures to improve the labour supply and trainings on DCFTA requirements;
- Supporting implementation of new regulations; and
- Improving operational standards.





**UNDP supported the development and implementation of the PMAG Packaging Cluster Strategy for 2020-2023<sup>4</sup>** in cooperation with cluster members and other stakeholders, who took part in interviews, questionnaires and workshops during the first half of 2020. The Strategy includes actions aimed at helping companies in the packaging value chain in Georgia become more innovative and aware of their potential. By 2023, the PMAG Packaging Cluster will become a strong cooperation platform, offering all stakeholders the opportunity to develop competencies for sustainable competitiveness and to network with other stakeholders in creating, developing, producing and providing price-competitive and innovative packaging solutions on the international market. PMAG Packaging Cluster members share the values and principles of its internationally recognized quality label, which represents quality, flexibility, client-orientation and trust. As a reliable partner, the PMAG Packaging Cluster cooperates with other clusters in the world and is supported by the Georgian diaspora in developing and sustaining business relationships in foreign markets.

**UNDP strengthened the PMAG Packaging Cluster by raising the Cluster's awareness of the many challenges faced by packaging companies in Georgia.** UNDP supports cluster to follow from nearby the opportunities in downstream sectors on the domestic market and abroad, building relationships with other packaging clusters in the wider Eurasia region and entering contact with the Georgian diaspora to identify and take advantage of business perspectives. UNDP supports PMAG Packaging Cluster to steadily develop new services based on analyses of needs and expectations from Cluster Initiative members.



The world is rapidly introducing new packaging technologies at the intersection of several industries (e.g. material sciences, information technologies, creative industries). However, the packaging industry in Georgia lags far behind. Many packaging companies are underinvested. Further, personnel lack key competencies, which hampers the overall industrial transformation process. In response, PMAG is focusing on strengthening the overall

competitive position of the domestic packaging companies by supporting the modernization of machinery; developing competencies among staff; attaining compliance with international quality, food safety and environmental standards; improving materials sourcing; and by supporting product development.

Many companies deem the domestic market to be saturated, with little potential for growth. However, PMAG sees opportunities to bring together actors in the packaging value chain in order to better exploit new opportunities in customer segments that were previously unaddressed

<sup>4</sup> Annex UNDP Cluster Management Organization Development in the Packaging Sector in Georgia



due to the lack of joint initiatives. PMAG will initiate and stimulate networking with representatives from downstream industries in the Imereti and the Kakheti regions.

In contrast, packaging companies perceive opportunities in the Black Sea area, the Caspian Sea area and in the Gulf area. Actions in the PMAG Packaging Cluster Strategy framework will help increase the presence of domestic packaging companies in international markets.

During the first half of 2020, **UNDP arranged a series of workshops on the CMO's structure.**<sup>5</sup> Based on the outcomes of workshop discussions, a concept for cluster initiative regulations was prepared. These regulations cover the roles and functions of cluster members, the CMO board of directors and the CMT. In developing the regulations, cluster members came to the consensus that the CMO organizational structure should be composed of the PMAG Packaging Cluster Assembly, the PMAG Board of Directors and the CMT. It was also determined that the PMAG General Assembly should be responsible for the legal and financial supervision of the PMAG Board. For each of these bodies, the regulations provide a description of their function, the roles of their members, a logical governance system, job descriptions and functions of the CMT.

The cluster initiative regulations are the formal framework for establishing relationships among members and the CMO. At this point, the cluster initiative structure's competencies, roles and responsibilities are clearly defined. Current cluster members reached a consensus and defined the regulations and tasks of CMT personnel. The cluster brand and website have been developed,<sup>6</sup> which actively announces new initiatives. **Corresponding social media pages have been developed, including on Facebook,<sup>7</sup> LinkedIn<sup>8</sup> and YouTube<sup>9</sup> (with promotional video guide);** information materials are being prepared. As such, the CMT has been positioned with the information necessary to promote the cluster initiative among a wider group of stakeholders and to acquire new members.

The possibility to hire additional CMT personnel is related to the ability to generate revenue (primarily from membership fees). As shown in other clusters in Europe, it takes time to convince companies to make use of paid services organized by the CMO; the situation in Georgia is like other countries. In most cases, companies want to engage only in project-financed services, paying nothing or as little as possible. As such, the management team will have to play an active role in supporting companies and showing the added value of their inputs. Therefore, the strategy foresees the strengthening of the institutional capacities of the CMO by increasing the CMO staff's management skills and competencies and by strengthening business service development and delivery.

<sup>5</sup> UNDP Annex: Proposal CMO's Organization Structure

<sup>6</sup> [www.pmag.ge](http://www.pmag.ge)

<sup>7</sup> <https://www.facebook.com/clusterpmag/>

<sup>8</sup> <https://bit.ly/3tjpeee>

<sup>9</sup> <https://bit.ly/2QL0Hlq>



**UNDP supported the development of ‘The Business Plan for the PMAG Packaging’<sup>10</sup> Cluster**, which is in line with the Cluster Strategy for 2020-2023. The Business Plan includes the framework conditions for delivering appropriate actions to reach the goals and targets. It defines the organizational aspects of the CMO in relation to its mission, which is to improve the competitiveness of cluster members active in the packaging value chain in Georgia by stimulating cooperation among members and with other organizations in Georgia and abroad and by delivering services in areas such as company management, change management, technology development and innovation, internationalization of business activities, conformity with national and international environmental regulations, quality and safety standards and consortium building for joint projects and business activities.

The Business Plan presents the financial conditions necessary to secure sustainability and the marketing approach towards potential new members. Taking into account the stage of cluster development, the CMT and the PMAG Board of Directors will revise the Business Plan annually.

**UNDP has developed new dimensions for the PMAG Packaging Cluster Strategy Implementation Improvement:**<sup>11</sup> The PMAG Packaging Cluster started implementing its strategy in the second quarter of 2020. The COVID-19 pandemic caused some difficulties in reaching potential new members. Nevertheless, the CMT, supported by the UNDP team, provided analyses on the impacts of COVID-19 on companies in the packaging value chain and organized online workshops and meetings with companies. During these meetings, participants showed interest in joining the cluster.

To strengthen the strategy implementation process, advancement presents a partnership approach with organizations in Europe. The approach covers issues related to environmental protection, competencies development and institutional development of research capacities. Specific elements include:

- **Partnership for environmental protection**, which covers a circular economy, extended producers responsibility and bio-based materials. This is in line with the strategy’s targets of strengthening the overall competitive position of domestic packaging companies and securing compliance with environmental protection standards.
- **Partnership for competencies development**, which covers information about **training** organizations and is focused on packaging design, general packaging competencies, and manufacturing and processing-related competencies. This is in line with the strategy’s targets of strengthening the overall competitive position of the domestic packaging companies and strengthening managerial and technical competencies.

<sup>10</sup> Annex: UNDP Proposal on The Business Plan for the PMAG Packaging

<sup>11</sup> Annex: UNDP Proposal on the PMAG Packaging Cluster Strategy Implementation Improvement



- **Partnership for competencies development**, which includes information about **research and development** institutes that might support setting up and developing a virtual center for expertise in packaging in Georgia based on the available potential of research. This is in line with the strategy's targets of strengthening the overall competitive position of the domestic packaging companies and strengthening managerial and technical competencies.

To evaluate **packaging sector development trends**<sup>12</sup> for the 2020, the project surveyed packaging cluster member companies and collected statistical data relating to the packaging sector, packaging producers and consumers. Trade statistics were also collected and analysed. The goal of the research was to analyse the development trends of the Georgian packaging sector and of value chain participants across Georgia (with the particular focus on Imereti, Kakheti and Tbilisi) for 2020. In the scope of the project, 37 packaging cluster member organizations were surveyed and packaging product import and export statistics for 2020 were collected and analysed.

The Georgian packaging manufacturing sector is in the early stage of development. Despite intense foreign competition, local manufacturers are managing to successfully compete and to increase their sales every year. Government programmes (e.g. Enterprise Georgia) and financing schemes are helping a lot with this. Notwithstanding the low volume of exports at this stage, focusing on quality standards and certifications can significantly increase export sales and supplant packaging imports in near future.

Overall, the **average turnover** for cluster member companies **decreased by 12.4% compared to 2019**, however, the average turnover of the packaging cluster member companies for **in 2020 increased by 23.6% compared to 2018**. This increase occurred despite the fact that sales in 2020 decreased over the year due to the pandemic. The project target was 20% growth, so even in the face of Covid-19, sales are above target. Over the year 2020 the number of cluster members was increased from 8 to 37, so the turnover for this reporting period was tracked for more companies than for the previous one. Despite the fact that sales for 2020 decreased over a year due to the pandemic situation, the **turnover for 2020 is still 21.9%** more than benchmarking year 2018 figures. **Project target is 20% growth**, so even in Covid-19 reality sales still are above the target.

Packaging producer companies (full members of PMAG) appears to be more resilient to pandemic realities than other downstream businesses in packaging cluster. Turnover growth from 2018 to 2020 for packaging companies is 40.9% compared to 21.9% growth for all members together. For 2020 Packaging Producer Companies turnover was slightly increased by 3.97% compared to 2019 results.

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<sup>12</sup> Annex: UNDP Packaging Sector Study Report 2020



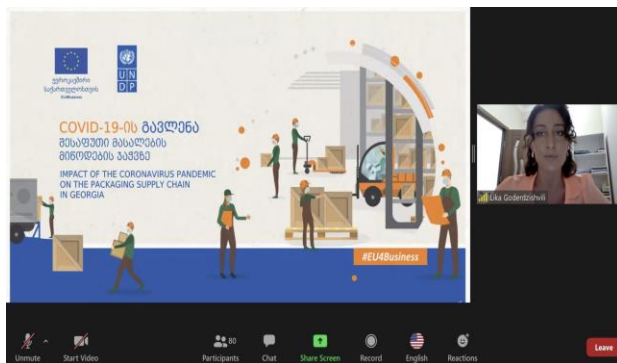
UNDP positioned the CMO as a supporter of companies in addressing challenges related to the COVID-19 pandemic. In furtherance of this support, UNDP conducted the **Pandemic Impact Assessment on Packaging Supply Chain in Georgia**,<sup>1314</sup> which included interviews with representatives from **718 companies in the packaging value chain**.

According to the Impact Assessment, over 70% of Georgia's packaging supply chain firms — like many other businesses in the world — were insufficiently prepared for the pandemic disaster. However, it is encouraging to see that the same 70% look to the future with hope, striving to explore new economic opportunities after the lockdowns end.

**The Impact Assessment provided the private sector and government authorities with solid evidence of the challenges faced by Georgia's business**, pointing out what needs to be done to increase crisis resilience and to build back better, with the aim of joining efforts to revive the economy post pandemic era, to solve the needs and utilize opportunities to unleash full potential of the sector.

The Impact Assessment's survey results show that it is a priority for businesses to plan their business continuity and to diversify their product and sales channels. Businesses need support in developing crisis recovery and business continuity plans, getting business and financial advice and sharing experiences with other companies. These needs could be addressed by creating targeted programmes and by engaging business support organizations (e.g. associations and membership-based organizations) and by engaging businesses in clusters.

Regarding the further implementation of the programme, UNDP aims to take into consideration new pandemic-related problems and opportunities for companies in the packaging value chain. UNDP will provide adequate support in order to enhance the ability of these companies to effectively cope with the emerging situation. To these ends, relevant information has been collected about the businesses.



**Addressing the challenges observed by the Pandemic Impact Assessment on Packaging Supply Chain in Georgia:** The spread of the COVID-19 pandemic at the outset of 2020 has significantly slowed global economic development; this negative impact was felt in Georgia. Factors such as plunged domestic and foreign demand, impeded production, reduced tourism and trade, loss of customer confidence and imposed financial terms and conditions

<sup>13</sup> Annex: UNDP Study on Pandemic Impact Assessment on Packaging Supply Chain in Georgia, Presentation on Pandemic Impact Assessment on Packaging Supply Chain in Georgia

<sup>14</sup> See Power Bi Presentation: <http://bityl.pl/vT5A8>



have created barriers for smooth functioning in every sector of the economy — including the packaging industry. Indeed, the state of emergency, introduced to stop the spread of COVID-19, has greatly affected the enterprises both domestically and throughout the world. UNDP has conducted a research - Pandemic Impact Assessment on Packaging Supply Chain in Georgia. This report highlights the outcomes and key findings of the above-mentioned research.

According to the Impact Assessment, 83% of surveyed companies perceive the pandemic crisis as a serious or partially significant threat and estimate that it will have a substantial impact on their business operations. Despite these expectations, more than a half of the companies did not face any workforce shortage problems amid the pandemic. The business processes of one fifth of surveyed companies were affected mostly by employees' restricted movements or quarantine. Only 17.2% of the companies temporarily reduced the number of their employees.

Combating the crisis generated the need for remote working and telecommunications for businesses. Only one third of surveyed companies turned out to be completely ready for the challenge. It is no surprise that company size correlates with its level of preparation, infrastructure and digital facilities for remote work.

The Impact Assessment revealed that the crisis is a significant challenge for packaging materials producers, the majority of which did not have business insurance, sufficient financial assets or contingency or business continuity plans before the crisis. According to the analysis, 71.4% of respondents did not have any resilience to or readiness for the crisis; they are vulnerable to radical changes by internal or external factors.

The Impact Assessment also enabled the identification of new opportunities for businesses and the delineation of relevant recommendations. The majority of companies agreed that the events developed due to the pandemic **created some new business opportunities**, such as developing new goods and services, changing and adjusting existing goods and services, exploring additional markets, entering new markets, enhancing current capacities and production levels and developing of online sales and purchases.

Based on survey results, the project took actions to **diversify products and sales channels**.

The lack of business insurance and continuity plans remain a significant problem. It would be beneficial if policymakers planned special measures to support this sector by ensuring the strategic readiness of businesses, raising awareness on the importance of having crisis recovery or business continuity plans and by offering insurance packages that includes business interruption insurance.

UNDP supported the cluster initiate a **joint procurement of health insurance scheme** within the cluster. This is one of the examples of **interfirm cooperation raising cost effectiveness and improving well being of workers**.



**The research suggests that companies need assistance in the following components:**

- Receiving face-to-face business advice and consultation;
- Holding webinars about possible assistance;
- Sharing news via digital channels;
- Getting general financial advice and advice on loan disbursements; and
- Sharing experiences with other companies.

The needs have started to be addressed through the implementation of targeted programmes within the PMAG Packaging Cluster, such as developing tighter and closer linkages with target businesses, developing a cluster and by focusing collective efforts to cope with these issues.

The packaging cluster, created in 2019, was dramatically expanded over a year. In 2020, based on UNDP consultants' recommendation, **PMAG introduced the multi-tier membership structure**, attracting more members from the packaging value chain. Out of **37 members, 18 companies are full members** (packaging producers) and **19 are associated members** from different parts of packaging value chain. PMAG also introduced the free honorary membership for educational organizations and other supportive non-profit institutions to strengthen linkages between these organizations and cluster members. In 2020, PMAG had five honorary members in addition to the 37 full and associated members (42 in total). **Nine of the 37 (24.3%) member businesses are women-led.**

The capacity of the CMO was improved; it has **seven employees at the end of 2020** compared to three in 2019.

**The balance of foreign trade in packaging products improved.** In 2020, the total value of imported plastic and paper packaging products was US\$46.00 million. This is 14% less than in 2019 (\$53.49 million) and 14.2% less than in 2018 (\$53.64). Meanwhile, the total export figure for those products together reached \$13.91 in 2020. This is 5.98% less than the \$14.79 in 2019, but still up by 56.5% from \$8.89 million in 2018. Consequently, compared to 2018, the balance of trade (net import) was reduced (improved) by 28.3% due to the growth of paper packaging products export. The trade balance for 2020 for paper and plastic packaging together was negative \$32.10 million in 2020, negative \$38.69 million in 2019, and negative \$44.76 million in 2018.

**UNDP support to the cluster and sector throughout 2020 results:**

The packaging industry has gradually developed as **a coordinated system** that ensures the safe and effective movement of products along the entire supply chain. The packaging value chain reduces total costs of the system, ensures improved quality and customer service and, eventually, will make it possible to maximize the consumer value, sales and profit.



The importance of **packaging materials is inseparable from supply network management processes**. In order to establish a successful supply network, packaging systems are linked to aspects such as marketing, logistics, production and environmental compliance. Protecting goods from damage and extending their shelf life makes it possible to effectively distribute goods. Packaging is also a way to effectively communicate with consumers; as such, it is a key promoter in the competitive market.

The packaging value chain is a unity of elements that affects the cost of packaging. Factors that affect the supply chain include inputs, labour resources, equipment, transportation and logistics, warehousing services, quality control, supplier performance and other direct or indirect costs. It is due to such multilayered facets that the streamlined functioning of the packaging value chain and its compliance with quality standards affects many economic sectors.

#### **b. Seed/Seedlings Sector (FAO):**

With the **establishment of the Georgian Seeds and Saplings Association (GEOSSA)** - explained in detail in section *Indicator 2.8. Creation of a National Seed and Seedling Association-*, the ground is ready to start bringing together different stakeholders along the seeds and saplings value chain and related and supporting sectors, as well as public sector in pursuit of enhancing sector competitiveness through mutually beneficial joint initiatives. The Association will act as a **cluster management organization (CMO)** working to create and develop the clustering approach in the seeds and saplings sector and will be responsible for the planning and implementation of the cluster strategy and the coordination of activities and services based on cooperation and networking. The CMO will facilitate the creation of the cluster, identifying actors that can potentially have a stake in the sector and then supporting the collaboration between the stakeholders, with an ultimate aim of enhancing interaction, collaboration and joint activities/initiatives, for mutual benefit.

The mission of the CMO through the cluster approach is to make plant production and propagation a more sustainable economic activity for all cluster stakeholders involved, by helping them to work jointly towards the improvement of quality, conformity with internationally recognized quality, phytosanitary and marketing standards and exploitation of trade opportunities. Support for the quality improvement and expansion of domestic production will enhance sector competitiveness and will alleviate import dependency, making Georgian planting material more safe, easily traceable and affordable for producers, ultimately contributing to private sector sophistication, boosting country's trade potential, particularly import substitution and export development, with a more equitable distribution of economic gains along the value chain in Georgia.

The establishment of the cluster will be backed by state regulation to push the plant sector forward as a whole, aiming to modernize it and to make it more balanced and reliable for all stakeholders. The plant sector in Georgia will be regulated in adherence to the plant material act





of the EU and will follow two routs: mandatory CAC (Conformitas Agraria Communitatis) qualification system (for nursery management) and a voluntary certification system (for saplings). Qualification of nurseries is aimed at ensuring that the process of production of saplings is transparent, safe and reliable with regard to varietal purity, homogeneity and plant health, especially focusing on protection of plant materials from quarantine pests.

The aim of the cluster is to identify and tackle problems and bottlenecks undermining the whole sector with greater cohesion and consistency than individually. To this end, a **diagnosis of the sector has been conducted** to form the basis to develop a strategic vision and action plan for the cluster. This study has been drafted with a view to develop an understanding of the socioeconomic and institutional environment, to detect potential leverage points for the intervention, to provide a baseline for future monitoring and evaluation of cluster development projects and to build initial trust with and among the stakeholders. The study also entails potential intervention areas to overcome the prevailing issues vis-à-vis possibilities of joint actions on the part of the cluster actors. However, this first diagnosis needs to be regularly fine-tuned, discussed and revised with relevant stakeholders and complemented with specialized studies, on a need basis, at later stages.

Preliminary findings of the diagnosis show that nurseries in Georgia can be found all across the country and the members of the Association are, similarly, located in different regions. Therefore, it was decided that geographically, the whole country would be considered for the cluster, without being limited to a particular region. The main locations of member nurseries are Kareli, Gori, Marneuli, Mukhrani, Mtskheta, Senaki, Zugdidi, Sagarejo, Gurjaani, Tskaltubo, Rokhi and Tbilisi, covering large part of the country, from the west, all the way to the east. Saplings are produced for a variety of perennial crops, mainly for almond, walnut, hazelnut, berry crops, apple, grape, sub-tropicals and others. Seeds sector comprises wheat and barley seed producer firms. Generally speaking, nurseries in Georgia operate under various conditions, usually in an open air environment. Small ones manage just a couple of hectares (or less), whereas larger ones can have couple of dozen hectares used for nurseries. Number of saplings produced by each nursery also varies highly, from one or two hundred thousand plants to couple of million per year. Although some of the primary input-raw material is purchased and is available locally, nurseries depend on imported raw materials. Seeds, rootstocks, grafting materials (cuttings, buds, graft sticks), in vitro plants and even grafted ready saplings are counted among the demanded types of planting material.

Nurseries in Georgia have similar problems and bottlenecks, which can be identified in multiple directions, such as territorial closeness and coexistence of nurseries with orchards/vineyards (increasing the risk of infestation by harmful organisms), lack of varietal homogeneity, lack of infrastructure and space for isolation of basic materials, lack of knowledge about varieties, absence of plant passport and field registries, etc.. Besides agro-technical difficulties, the sector also lacks economic competitiveness. The nurseries are usually dependent on sourcing of rootstock varieties from abroad, paying for them upfront, which inflates their costs and creates



cash flow constraints, also increasing the final price of saplings for growers/primary producers, undermining the sustainability of the sector as a whole.

Based on the results and conclusions of the diagnosis, a **Cluster Development Strategy** has been elaborated. Effective organization of the cluster, closer collaboration and networking between nurseries, value chain stakeholders and related industries, as well as state agencies should help alleviate all of the aforementioned difficulties. Cluster development should concentrate its efforts on the following main areas:

- Support of information sharing and inter-stakeholder direct communication
- Improvement of value chain linkages
- Facilitation of public-private dialogue
- Boosting the adoption of modern production methods and innovation
- Supporting capacity development.

It is paramount to understand that the inter-stakeholder collaboration should happen naturally and voluntarily amongst all stakeholders. Joint activities will take place if the stakeholders express their interest freely. The collaboration will happen only if it is voluntary and once all parties recognize their benefits from such collaboration. If points of mutual benefit are not found between parties, unnatural top-down imposition of partnership initiatives is not desired.

To achieve the above objectives, the following points have been defined (to be further developed and expanded based on the incorporation of new members and the identification of new identified collaboration opportunities) as main strategic pillars for the CMO to be implemented during 2021:

1. Information sharing and inter-stakeholder communication: There will be three directions in which to develop a platform for communication.
  - Creation of a Facebook page (platform). This page will take on a role of a forum, where each cluster stakeholder can join. Each stakeholder will be able to post topics, together with text and pictures, allowing them to raise issues, ask questions and post different initiatives for discussion.
  - Creation of a website, presenting information on the cluster and different cluster stakeholders to facilitate networking amongst interested parties.
2. Improved value chain linkages: The CMO, through the cluster approach, will facilitate interaction between different value chain stakeholders, putting them in touch with each other to boost commercial relationships. Some of the initially identified inter-firm initiatives are the following:



- Members of the seed and saplings sector usually have concerns related to sourcing of new varieties and identifying reliable suppliers. Some nurseries have better sourcing experience than others. Through the cluster, nurseries can share information and experiences to facilitate the process.
  - Farmer associations will ensure better access to farmers, as potential clients of nurseries.
  - Producers of Georgian wheat varieties have a need to find customers in the bakery sector, but for this to happen it is necessary to have collaboration between bakers, wheat growers and seed suppliers. For example, one of the restaurants in Sighnagi, ‘Pheasant’s Tears’, seeking to make traditional dishes, bake and produce food products from Georgian endemic species was put in touch with a producer of Georgian wheat ‘Tsiteli Doli’ and ‘Dhika’ who procures seeds from one of the members of the Association – ‘Lomtagora’.
  - Discussion with packaging producers will be organized with the support of UNDP as facilitator of the packaging cluster to identify seeds and saplings packaging market unsatisfied needs.
  - State laboratory of agriculture has agreed to provide discounts for testing on viruses to cluster members in exchange for consolidated orders.
3. Facilitate public-private dialogue: Nursery owners can provide their opinions and suggestions on different state initiatives related to the sector. CMO should facilitate interaction with public sector in raising their concerns amongst state representatives.
- A Viber platform, where agencies of the Ministry of Environmental Protection and Agriculture (MEPA) and sector stakeholders are included has been created.
  - Roundtable meetings and/or conference discussions with the CMO, FAO and the main state agency representatives (especially SRCA and the State Laboratory of Agriculture) have also taken place and will continue on regular basis.
  - The Association has been given a mandate to create a two-person commission to join NFA and SRCA field inspections to visit nurseries around the country, evaluate and assess their overall condition, as well as verify freedom from regulated pests at each inspected nursery. This will allow the Association members to express their opinion on decisions made based on field inspections.
4. Discussion on modern agricultural practices and innovation: Companies meeting regularly can discuss innovations in a sector. Some possible initiatives include:
- SRCA working on the production of scions from materials to be developed in their in vitro laboratories, prioritizing members of the Association to give access to pre-basic material. A list of varieties desired by GEOSSA members is being created on which SRCA can work and provide quality, certified basic material domestically, without nursery owners having to import it from abroad.



- A database of scientists working on different matters and agricultural directions, such as common pests in Georgia and other, is being created to be at the disposal of the nurseries in Georgia. The CMO will facilitate knowledge exchange between the scientists and its members.
5. Capacity Development: Besides theoretical and practical, on-the-field trainings on demo plots on CAC standards, plant protection, screen house management and others that FAO provides, capacity development for member nurseries can be facilitated by the CMO in different ways. Some planned examples are:
- The CMO, together with SRCA can help member nurseries become more competent at varietal identification. SRCA is working (together with GEOSSA) on a detailed morphological descriptions based on UPOV which have to be observed for different varieties.
  - Georgian Farmers Association (GFA) offered to support nurseries that are members of GEOSSA and which express their desire to implement GeoGAP standards with planning and managing the process. If member nurseries also start implementing GeoGAP standards, GFA can sign a memorandum on partnership with GEOSSA and demand from its GeoGAP certified member farmers to buy saplings only from accredited nurseries that also adhere to the same standard, so that both steps of the value chain align themselves with the same standards. GFA representatives can train nursery representatives on principles of GeoGAP standards and help with its implementation.
  - Interns from universities can be recruited to be trained on grafting technologies and to support nurseries. A recruitment opportunity within the Association can also be explored for those interns who will complete their internship programs successfully. Member nurseries will have to reach an agreement on this and may agree to share the cost of paying a salary for hiring the trained agronomists amongst themselves. Batumi Shota Rustaveli University has an agronomic faculty where practice on grafting and other plant related procedures are part of their curriculum. They showed interest in starting an internship program. The Agrarian University is also willing to organize the same type of program. Akaki Tsereteli State University also offered financial compensation to the Association for internship programs.

Some of the inter-collaboration initiatives are still being identified while others have already been implemented. Two examples are the pruning festival (organized in collaboration with REOSSA, the Hazelnut Growers Association and pruning experts) or the field exchange visit organized among some of the member nurseries.

**Field exchange visit:** Berry nurseries are struggling with managing their buyers, since berry growers often don't have knowledge about good agricultural practices, so sapling return rate is high. An exchange field visit has been organized at a berry nursery run by a member of the Association. Another member and a berry nursery producer participated in the field visit. The



exchange allowed them to connect with each other, share their experiences, raise awareness on good agricultural practices and see nursery infrastructure on sight.

**Pruning festival:** Pruning is one of the fundamental skills needed for good production and yields. What to prune, when to prune, how to prune and why to prune, will help to control the type of growth and plant’s shape and size, promoting healthy and productive plants.

At the nursery level, having knowledge on pruning is of a major importance, especially in terms of being able to identify the best system of pruning in a mother block.

The pruning festival was organized in different regions for six different crops: hazelnuts, walnuts, peach, apple, grapevines -local varieties, and grapevines – international varieties. Experts on pruning for each of the crops conducted the trainings.

Training	Trainer	Location	N. of Days
Hazelnuts	5 Hazelnut Association Agronomists	Kakheti	15
Walnut	Federico Lopez	Mukrani	2
Peach	Zviad Bobokashvili	Tirdznisi, Shida Kartli(1st day)	2
Apple	Edvard Shermadini	Ghvlevi village, Kareli Municipality	2
Grape vine local varieties	Levan Ujmajuridze	Jighaura	1
Grape vine	Julio Prieto	Mtskheta	2





### 3. Packaging and seeds/seedlings clusters enhanced through strategic investment (UNDP):

There is steady process of introducing new packaging technologies at the intersection of several industries (e.g. material sciences, information technologies, creative industries). However, the packaging industry in Georgia lags far behind. A survey of packaging companies conducted at the beginning of the of the project identified several issues, including underinvestment, low product quality standards and lack certification, lack of waste treatment, malfunctioning and insufficient equipment, occasional supply delays (raw materials are imported, causing production and price variances), and lack of personnel in key competencies. These factors hamper the overall industrial transformation process. To address these issues, the project has developed the Strategic Investment for Growth grant programme. The programme will focus on strengthening the overall competitive position of domestic packaging companies by developing new business models; facilitating technology transfer; modernizing machinery; developing competencies among employees; obtaining conformity with international quality, food safety and environmental standards; improving materials sourcing; and by supporting product development.

**UNDP conducted an investment needs assessment,<sup>15</sup>** which studied the packaging sector value chain's investment needs and identified constraints and opportunities to enhance inter-firm linkages that will unleash the sector's potential. The assessment took place in February and March 2020, and was conducted among 16 organizations active in the packaging value chain in Georgia.

<sup>15</sup> Annex: UNDP Report on Investment Needs



The assessment focused on a group of organizations that declared their interest in participating in the development of the cluster in the first stage. The majority of the surveyed companies were paper and plastic converters. Only two companies had the capacity to produce paper rolls. One of them was working for its own recycling only; the other was serving the other companies. There are few companies producing plastic granulated materials, but they only recycle their own secondary remains. Given this lack of domestic production, almost all supply comes from abroad, primarily from China, Iran and Turkey.

Among the 16 surveyed companies, 56% were plastic producers and/or importers, including rigid plastic packaging and flexible plastic foils and bags. 44% were producers and/or importers of paper and cardboard packaging products. The average age of the surveyed companies is 11 years. The average number of employees in the assessed companies is 50 people. In total, they employ more than 800 people and are selling products of 115 GEL. In terms of average yearly revenue (2017-2019), most companies declared a revenue between 0.5 and 36 million GEL. Average revenue is about 7.2 million GEL. Most companies declared an average yearly net profit margin (2017-2019) between 0% and 73%. The average yearly export revenue (2017-2019) of 8% of the assessed companies is situated between 0% and 90%. The vast majority of surveyed companies declared that they did not spend any significant resources on research and development.

Based on the survey results, the top three areas to be focused on for investment needs are **machinery modernization and upgrading, quality certificates and compliance with international standards, and capacity building and trainings.**

An important area for investment that the study identified was quality certificates and compliance with international standards — 63% of surveyed companies plan some investments in this area in near future.

**Most companies expect stable growth in 2022.** However, in general, companies are struggling to forecast and plan sales for 2025. Most of such forecasts lack a solid analytical foundation. Increasing the domestic sales/share by introducing improved products are clear, short-term winners for strategic focus. Foreign markets are on horizon for longer-term planning. In terms of investment needs, **companies involved in the assessment are strategically focused on:**

- Introducing new or significantly improved products;
- Increasing profitability by increasing productivity and efficiency of processes in the organization;
- Increasing profitability by introducing new products with higher added value;
- Introducing new or significantly improved production processes; and
- Introducing new or significantly improved product-related technologies.

**All of these areas need some sort of investment for machinery, technology upgrades and implementation.**

In planning for growth and development, internal and external financial difficulties are a major concern. The lack (or shortage) of financial resources and the difficulty in accessing external financing instruments were named as major barriers to new investment. This was followed by the high cost of machinery and equipment and the high saturation of the domestic Georgian market.



**The main areas where surveyed companies are seeking public or donor investment and support include modernizing production equipment, training and capacity building for employees (professional and management), procuring advisory/consultancy services linked to business development and attaining quality certificates and complying with**

international standards.

Based on the above-mentioned studies, in 2020 UNDP developed and commenced implementation of a **Matching Grant Scheme to Support Strategic Investment for Growth**.

The Grant Scheme was developed to ensure it addressed the project goal “to enhance entrepreneurship and business sophistication by strengthening the capacities of government and local entities to develop and operate clusters and supporting companies directly with strategic investments while also demonstrating the effectiveness of these strategies to businesses.” The Grant Scheme will also support strategic investments in companies that are deemed necessary to facilitate improvements in the cluster.

The objective of the Grant Scheme is to support active enterprises in the packaging value chain in Georgia (particularly developing business in the packaging cluster) through financing investment and service projects in line with the enterprise’s business plan and/or growth strategy. The aims of the Grant Scheme include strengthening grantee competitiveness, harnessing the overall packaging value chain and diminishing bottlenecks.

The Grants Scheme is available for enterprises capable of allocating co-funding. The geographic scope of the Grant Scheme is the Imereti and the Kakheti regions, including Tbilisi, and nationwide coverage given impact on the target regions.





The project has developed **Criteria for Support Measure in Packaging Sector Companies for Implementing Matching Grant Schemes.**<sup>16</sup> The terms of reference include a description of grants' purpose, selection criteria and monitoring processes as agreed upon with project stakeholders.

Grants are expected to cover **70%** of the total cost, with a **30%** cash contribution by the grant recipient. The minimum and maximum grant amount is **\$5,000 and \$50,000** respectively. UNDP anticipates that certain grants (especially larger grants) will be accompanied by corresponding training and the conclusion of maintenance contracts.

**The Grant Scheme supports:**

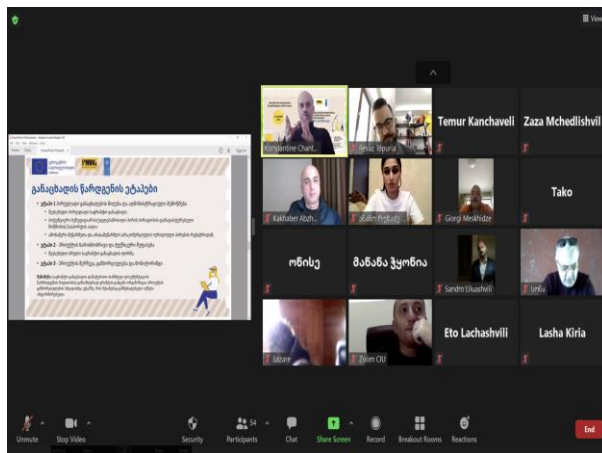
**1. Investment projects. Areas of intervention include:**

- a. Environmental upgrades, particularly related to extended producer responsibility.
- b. Specific production innovations for early adopters.
- c. Design innovations for improving added value; and

- d. Adjustment to production process to facilitate certification.

**2. Service projects. Areas of intervention include:**

- a. Environmental upgrades, particularly related to extended producer responsibility.
- b. Services related to product and technology innovation (e.g. advisory services, training, legal services, procedures to secure intellectual property rights); and
- c. Financing certification processes.



Following a general cluster development approach, the Grant Scheme has been promoted among the companies to submit applications of partnerships of two or more enterprises (joint projects).

To design and implement the granting scheme, the following documents were developed:

- **Grant Applicants' Guide;**<sup>17</sup>
- **Grant Application Form** (preliminary and full);<sup>18</sup> and

<sup>16</sup> Annex: UNDP Criteria for Support Measure in Packaging Sector Companies for Implementing Matching Grant Schemes

<sup>17</sup> Annex: UNDP Grant Applicant Guide

<sup>18</sup> Annex: UNDP Grant Application Form



- Concluded **Responsible Party Agreements**<sup>19</sup> with professional organizations for the implementation of the Grant Scheme.

In 2020, the project further elaborated the needs of the companies in strategic development through:

1. Analysis of existing business development strategies, business practices, systems of quality management, marketing and technological advancement; and
2. Coaching of and consultancy on the companies' management practices in strategic business development.

**The project designed and launched the application and selection process, which consists of the following steps and mechanisms:**

1. UNDP social media announcements;<sup>20</sup>
2. UNDP website announcement;<sup>21</sup>
3. PMAG Packaging Cluster Website announcement;<sup>22</sup>
4. Series of weekly information online sessions; and
5. Series of regional information meetings.

#### 4. Progress on output indicators

**UNIDO:** At the Output level, UNIDO aims at strengthening the capacities of policymakers and other stakeholders to identify and develop clusters.

*The Target 1.1 Cluster mapping undertaken based on prioritization criteria set with local counterparts (baseline – 0, target by 2022 – 1) was successfully achieved at 100% in 2019 and formally validated in 2020 as in the reporting period of 2019 UNIDO conducted first of its kind comprehensive mapping of 57 emerging and potential clusters in Georgia. As the mapping was conducted in 2019, the details of the report and the progress were presented in the project progress report of 2019, however, points related to the formal validation of the report and selection of clusters for diagnostic studies are presented in the reporting period of 2020.*

The cluster mapping was conducted according to UNIDO methodology and the following milestones were achieved in 2020:

1. UNIDO defined the cluster selection criteria and formally validated in consultations with various stakeholders (Activity 1.1.2 Definition of identification and selection criteria with national and local stakeholders, by December 2019 – 50%, by January 2020 – 100%).
2. UNIDO organized awareness seminar/workshop on cluster mapping to present and formally validate the results (Activity 1.1.5 Validation workshop, by December 2019 – 50%, by January 2020 – 100%). UNIDO organized Cluster Mapping Review Workshop on 22

<sup>19</sup> Annex: UNDP Responsible Party Agreements

<sup>20</sup> <https://bit.ly/33qWshA>

<sup>21</sup> <https://bit.ly/3xMNB7F>

<sup>22</sup> <https://bit.ly/2QWfw15>



January 2020 to present and formally validate the cluster mapping results (the mapping has been partially discussed at the UNJP Stakeholders Forum of the 20th of November 2019). The representatives of Government institutions, regional authorities and international organizations attended the workshop and positively evaluated the cluster report and pointed out the importance of the cluster development in Georgia for increased competitiveness of the private sector.

*The Target 1.2 No of emerging and/or potential clusters detailed diagnostic studies by the programme (target by 2022 - 8) was achieved at 40% as UNIDO conducted three cluster diagnostic studies out of eight planned studies, including studies of Pharmaceutical production with a focus on bacteriophage and herbal products (Tbilisi), Processing and preserving of fruits and vegetables with a focus on hazelnuts (Samegrelo-Zemo Svaneti), and Marine fishing (Samegrelo-Zemo Svaneti).*

Out of 57, eight clusters were selected for an in-depth diagnostic study based on the following four criteria: 1) Highest growth potential (from top 20 clusters), 2) Priority clusters for the government, 3) No prior diagnostic studies conducted for the cluster, and 4) No major technical assistance provided by development partners to support the cluster development.

The studies aim to review business operations of the companies, fix linkages between cluster members and stakeholders, identify challenges hampering cluster development, develop the vision of the cluster, and identify short, medium and long-term objectives. The cluster diagnostic studies defined the clusters, provided overview of its history and presented the clusters location map. It reviewed the production process, analysed business operations, presented vital statistics, and looked at the nature of cooperation in the clusters. The SWOT analysis of the clusters were presented, and short run objectives defined.

Three cluster diagnostic studies were prepared by UNIDO Cluster Team with major analytical inputs from subcontractors: TBSC Consulting and PMC Research Centre, in the period of June – September 2020. Subcontractors were selected through competitive bid.

The cluster diagnostic studies were conducted according to UNIDO methodology and the following milestones were achieved in 2020:

1. UNIDO identified eight emerging and potential clusters for an in-depth diagnostic study in close consultations with MoESD and MEPA (Activity 1.2.1 Identification of potential clusters for which the diagnostic will be undertaken, by March 2020 – 100%). Initially, UNIDO aimed at selecting these clusters by the end of 2019, however, due to delays with responding and holiday season this was achieved only in March 2020. Clusters selected by MoESD are: 1) Toys (Tbilisi), 2) Marine fishing (Samegrelo-Zemo Svaneti), 3) Jewelry (Tbilisi), and 4) Pharmaceutical production with a focus on phage and herbal medicine products (Tbilisi). Clusters selected by MEPA are: 1) Wine (Kakheti), Poultry (Kvemo Kartli), 3) Processing and preserving of fruits and vegetables (Samegrelo-Zemo Svaneti), and 4) Processing and preserving of fruits and vegetables (Guria).



2. UNIDO trained local partners and service providers on how to conduct diagnostic studies (Activity 1.2.2 Diagnostic and on the job training for local counterparts, by December 2020 – 100%).
3. Series of focus groups discussions were organized as part of the three cluster diagnostic studies (Activity 1.2.3 Local focus groups and SWOT analysis, by December 2020 – 40%, by January 2021 – 100%)
4. Instead of organizing separate validation workshops at the local and national levels, due to COVID-19 restrictions, UNIDO opted for one validation workshop in order to present the results of three cluster diagnostic studies (Activity 1.2.4 Validation workshops at the local level, by December 2020 – 50%, Activity 1.2.5 National seminar to present the results of the mapping and the diagnostics, by December 2020 – 50%). Clusters' Diagnostic Studies Validation Workshop (virtual) took place on 29 September 2020 with the representatives of Government institutions, UN organizations and the private sector gathering in Tbilisi to discuss the results of the diagnostic studies of three clusters. The participants of the workshop validated the studies and pointed out the importance of cluster development. UNIDO plans to organize a similar validation workshop in March 2021 to present the results of the remaining five studies.
5. Cluster Diagnostic Studies also allowed to collect information of support institutions and other partners, which could be targeted during Awareness raising seminars on clusters (Activity 1.3.1 Identification of support institutions to be targeted, by December 2020 – 100%).

In parallel to the above-mentioned three cluster diagnostic studies, UNIDO launched remaining five diagnostic studies in November 2020, however, major achievements will be counted towards the reporting period of 2021.

*The Target 1.3 No of institutions and people trained on cluster mapping and diagnostic (% of women) (target by 2022 - 5 institutions, 30 people) was fully achieved at 100% by February 2020, since UNIDO conducted a capacity building training on the cluster development approach with a focus on diagnostics and action planning for sustainability on 12-13 February 2020. 30 representatives from MoESD, MEPA, Rural Development Agency, Enterprise Georgia, UN agencies, and private sector representatives such as TBSC Consulting and PMC RC attended the training. Approximately 43 percent of participants of the training programme were women.*

The training introduced the cluster concept, presented UNIDO cluster methodology, explained rationale for cluster diagnostic studies and discussed methodological tools as well as structure of the cluster diagnostic report, and provided details of the cluster capacity building, including governance structure of the clusters and the role of the cluster development agent, trust building, vision building and action plans, monitoring and evaluation, and gender mainstreaming in cluster development.

## **UNDP: Output 2. Development and functioning of the clustering approach in the packaging.**

*Indicator 2.1 Number of CMOs that are operating in the packaging sector, target for 2022 is 2, Achieved, 1 in packaging sector, with 3 Representations (Tbilisi, Kakheti and Imereti).*

To achieve this milestone, UNDP continued to undertake the following actions:

- 1. Raising Awareness in Clusters:** UNDP continued to present a series of workshops (led by an international consultant) to raise awareness among packaging company representatives on the benefits and specificity of the cluster.
- 2. Needs assessment:** UNDP continued to conduct needs assessments (with a focus on investments, trainings and certifications, and COVID-19 impact assessments). Findings of the studies were presented to company representatives with special attention given to illustration and delivery of joint actions to overcome challenges. Presentations also raised interest in the cluster.
- 3. Cluster management capacity development through international best practices:** UNDP organized a **workshop on cluster management**<sup>23</sup> to support PMAG and other Georgian CSOs strengthen their capacities; to further share the Hungarian experience with Georgian clusters and CSOs; to introduce advanced principles of cluster management to local clusters and associations; to share current trends and innovations on the example of European clusters; and to review aspects of cluster operation so that Georgian clusters and associations can implement modern technologies and innovations in practice and function successfully. The workshop was designed to help cluster and association managers use the knowledge gained to implement the latest management methods and models in their clusters and to function more efficiently.

The workshop was attended by 26 participants from 12 organizations. The course was led by representatives from the Hungarian cluster of packaging technology, Omnipack.<sup>24</sup> Founded in 2003, Omnipack is one of the first Hungarian clusters. The cluster integrates the complete value chain of the packaging industry and the companies operating in it. There are currently 35 members in the cluster. Omnipack is a strategic alliance of companies operating in the same market segment. The main goal of the cluster is to support the development of eco-



friendly packaging and the introduction of modern technologies in the field of packaging. The Omnipack Circular Economic Platform was initiated by Omnipack. Platform members include companies operating in the circular value chain, including representatives from the public, industrial, academic and civil sectors. The main goal of the platform is to create a



network of sustainable packaging technology in Hungary that can establish sustainability in the circular economy, lead to positive changes in packaging regulations and the elimination of financial constraints that will ultimately affect the entire industry. Omnipack plays a key role in this as a catalyst for the sector and one of the main supporters of the green economy. Thanks to this multifaceted experience, Omnipack representatives shared valuable tips and their own experiences with Georgian organizations participating in the workshop.

4. **Strategy building, implementation and advancements:** UNDP continued to support packaging company representatives build and implement their strategic visions and the operational work-plans being undertaken by the cluster initiative. The strategy is built on identified needs and challenges. With support from international experts, recommendations were developed to effectively adapt PMAG Packaging Cluster Strategy implementation to the 2020 pandemic.
5. **Institutional development of the CMO:** Several internal regulations have been implemented for effective CMO operations. The drafting of regulations was accompanied by capacity-building actions for the CMT, including planning, services design, communications, visibility and inter-firm cooperation. The cluster has its **brand**, operates **web site**, **social media sites**, **YouTube channel and cluster-brand video**.
6. **Capacity development programme:** UNDP supported PMAG efforts to undertake a training needs assessment and to commence a capacity development programme with tailor-made solutions for companies' needs. The **capacity development programme** addressed the most-demanded topics, including labour safety, sales stimulations, marketing, project management, management and communication.
7. **Membership Expansion:** PMAG has extended membership to large- and medium-sized packaging producer companies. The CMO has a main office in **Tbilisi** and regional offices in **Imereti (Kutaisi)** and **Kakheti (Telavi)**. The presence of multiple locations strengthens member company connections within regions as well as integrates them into the capital city/Tbilisi hub of the packaging sector. The packaging cluster created in 2019 dramatically expanded over the year; the number of **members** increased to **37 in 2020** up from 8 in 2019. PMAG CMO **staff** also increased to **seven employees** at the end of 2020 (compared to three in 2019).
8. **International membership in the packaging sector:** In November 2020, the PMAG Packaging Cluster became the first cluster in the region to join the **World Packaging Organization**. The World Packaging Organization unites 66 members from 47 countries. Founded September 6, 1968 in Tokyo by visionary leaders from the global packaging community, the Organization's purpose includes: encouraging the development of packaging technology, science, access and engineering; contributing to the development of international trade; and stimulating education and training in packaging.



The World Packaging Organization’s primary activities include promoting education through meetings, special activities, and publications; sponsoring an international packaging design awards programme; and facilitating contact and exchange among the various national institutes of packaging. Membership allows PMAG Packaging Cluster members to get easier access to new developments and **technologies in the worldwide packaging sector**.



**9. International membership in cluster excellence:**

PMAG has officially joined the **European Cluster Collaboration Platform (ECCP)**. The ECCP is an action of the Cluster Internationalization Programme for SMEs funded under COSME (the EU programme for the Competitiveness of Enterprises and SMEs) launched in 2016 by DG GROW of the European Commission. At the service of cluster organizations, with a unique offer of cluster news, matchmaking events and tools supporting collaboration, **the ECCP will serve as a hub for facilitating PMAG’s collaborations at the**

**European and global levels.** ECCP fosters such cooperation by facilitating connections between clusters from Europe and beyond and helping SMEs access third markets and find strategic partners in global value chains. ECCP gathers more than 100 cluster organizations. With an average of 100 SMEs per cluster, it can reach out to about 100,000 SMEs across Europe.



**10. Local partnerships:** The project cooperated with local and regional authorities, business associations and educational institutions. During the reporting period, to fill a mismatch of labour supply and member businesses demands, PMAG signed memorandums of cooperation with **5 five leading universities in Georgia** (Free University, Agricultural University, Akaki Tsereteli State University, Construct2 College, Free University and Kutaisi University).

The memorandums aim to support students develop as professionals, realize their personal potential and to develop the practical skills and competences necessary to meet modern requirements. PMAG also launched an **internship programme** for students at the universities, bringing fresh knowledge in PMAG’s member companies to promote youth employment and overcome first-job issues.



**11. International partnerships:** UNDP promoted the internationalization of the PMAG Packaging Cluster by establishing a cooperative partnership with **Ukraine's Regional Cluster of Polygraphic and Packaging Industry**. The partnership establishes cooperation between the parties in order to develop the Ukrainian and Georgian printing and packaging industries. The partnership focuses on establishing raw materials and purchasing groups, developing packaging technologies, engineering and production technologies, and conducting cross-cluster projects. The partnership memorandum anticipates post-pandemic cooperation in terms of realizing opportunities, providing solutions and exchanging knowledge, skills and expertise in product development and innovation.

**Indicator 2.2 No of companies who are part of the CMO in the packaging sector and the seeds and seedlings sector.**

*The target for 2020 is 50 companies in both clusters. By the end of 2020, the PMAG Packaging Cluster combined 42 members from the packaging sector (37 full and associate members and five honorary members).*

UNDP has undertaken the following measures since the beginning of the project:

- 1. Strengthening and advancing the CMT and representation in the Imereti and Kakheti regions:** To effectively implement cluster operations, strategy implementation has commenced, organizational structure and the core team has been built. Regional representation has strengthened outreach and support efforts for packaging cluster member companies from Imereti and Kakheti.
- 2. Expansion of membership:** UNDP supports institutional development of PMAG so that its developmental impact reaches at wider angles both nationally and regionally. Online Member Catalogue: <https://bit.ly/3ukpE5D>

As of 2018, eight member companies had combined total assets of GEL 40 million. 2018 revenue was GEL 35 million and 2019 revenue was GEL 56 million. Employment was 300 people. **In 2020, the combined total revenue of the 37 full and associated members surpassed GEL 118 million; total employment reached 1,220 people.** Women representing both at managerial and operational roles.

Special attention was given to the inclusivity of women in the initiative, delegating cluster development managerial roles to women representatives of the companies. This approach ensured that trust was quickly built among member companies and transformed participants' mindsets towards cooperation.

Members companies represent different segment of packaging sector, like paper, plastic and plastic foil packaging. Project found out that, based on preliminary data, the revenues (total sales) of the cluster member companies in 2020 surpassed 118 mln GEL which is up to 22% increase from the 2018 sales figure of the same companies. Generally, cluster members will range from manufacturers of all types packaging manufacturing companies (full membership)





and companies form upstream and downstream packaging value chains and providers of various supporting services for the industry (associate membership). Current information shows that the position of domestic packaging producers remains rather weak. PMAG Packaging Cluster started to integrate material suppliers, packaging application industries, logistics and distribution, supporting industries (printers, designers, equipment suppliers) and recycling companies to intensify dialogue and cooperate with these packaging producers. The challenge of remains (though with a positive outlook) to continue expansion trend and reach self-sustainability level.

Project undertakes actions to overcome this challenge and to support the packaging industry and individual members enhance their competitiveness and scale-up through synergies of collaboration across the value chain as well as institutional strengthening PMAG Packaging Cluster. It is expected that UNDP support actions will enable the CMO to expand membership **beyond 50 members (full and associate membership) by the end of 2021.**

**Indicator 2.3 No. of inter-firm collaborative initiatives/projects undertaken between the CMOs' members.**

*The target for 2022 is 10 for both clusters. Five activities were initiated and supported in 2020 in the packaging cluster.*

**UNDP supported the preparation of the Strategy on Inter-firm Cooperation:**<sup>25</sup> Supporting inter-firm cooperation is among the most important — and one of the most difficult — activities that a CMT can organize for its cluster members. The ability to reach good inter-firm cooperation is the main differentiator between regular business support organizations (which often apply a bilateral approach in a client-service supplier relationship) and a CMO. Inter-firm cooperation in clusters exceeds regular business contract relationships. Such cooperation is a consequence of long-term trust building between organizations that conclude that they have resources (e.g. human capital, knowledge, competencies, infrastructure, financial capital) at their disposal that could be joined for a common purpose while meeting the interests of each organization individually.

A significant challenge for the CMT is to estimate companies' readiness levels to enter into this kind of cooperation arrangement. Taking into account that at the beginning of the cluster development process, companies do not really know one another other than their product portfolios on the Internet, it is recommended to promote inter-firm cooperation issues in thematic workgroups related to 'safe' issues such as employee training and education, trend analysis and assessments of the impact of new laws on the sector. Smaller companies with limited access to market information will often be reluctant towards inter-firm cooperation because they see a potential competitor in every other organization and often fear losing the small amount of knowledge they have in joint initiatives with other cluster members.

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<sup>25</sup> Annex: UNDP Recommendation on Inter-Firm Cooperation



A second challenge is to avoid a two-speed scenario in the cluster, meaning that one group of early members have come to know each other over time and are more open to cooperating while the other group of newcomers still observes the situation from the side. Without active intervention by the CMT, there will be a risk of two coalitions being constituted, with several companies feeling being excluded from specific opportunities. To avoid this, the CMT should maintain individual contacts with every cluster member and apply an inter-firm cooperation template to identify potential areas of interest of each company in the cluster. The CMT should also support cluster members in identifying potential cooperation partners within the cluster and in setting up meetings between potential partners. Depending on the policy applied in the cluster, the CMT can limit its approach to bringing potential partners together, or it can apply a more complex approach by supporting the partnership-building process up to the moment of concrete projects.

The COVID-19 pandemic has made it more difficult to meet with companies and to identify issues for inter-firm cooperation. Nevertheless, the CMT should try to meet with cluster members. An inter-firm cooperation workshop series was organized within the cluster. **UNDP Developed Strategy, which includes an action plan for the CMT to support inter-firm cooperation.**

**Workshops on inter-firm cooperation-promoting mechanisms:** A series of online workshops were organized to initiate the inter-firm cooperation process with the participation of companies involved in the packaging supply chain. The packaging supply chain includes all companies whose business activities are related to the production of packaging, its supply and consumption. The purposes of the workshop were to encourage collaboration between businesses and to identify collaborative projects. Each participating company provided a brief overview of their business activities. Six companies from Tbilisi, nine companies from the Imereti region, eight companies from the Kakheti region offered their own resources and vision for implementing joint projects. These companies were given five minutes to give a prepared presentation at the workshop. Overall, the workshop had 30 attendees. **As a result, 14 joint inter-firm initiatives were identified; basic descriptions were prepared and presented to all participants.**

Considering the results of the packaging companies' study and international experience, an action plan for product and service development by the CMO has been prepared. Further, execution of a short-term strategy has been started and actions that were considered 'low-hanging fruit' for quick wins in CMO development have been initiated. Initial results will be reported in the next reporting period.

- 1. Development of the group buyer framework for the CMO:** UNDP, with the help of international and local consultants, developed the group buyer regulations for the PMAG. The regulations define the rules for business-to-business group purchases in the PMAG Packaging Cluster. Group purchases will take place in the form of group buyer initiatives. The purpose of group purchases is to **optimize cost structures in companies** operating in



the PMAG Packaging Cluster and to obtain maximum benefits in the field of business-to-business purchases. PMAG has started implementing the group buying process.

**The buyers group initiative has been commenced to purchase health insurance.** First, a survey was conducted in order to identify member companies' needs in terms of insurance; health insurance was identified as the main need. PMAG started the process of negotiations with the leading insurance companies on the Georgian market. A number of online and face-to-face talks have been held, and four insurance providers have been selected. PMAG has received tailored insurance offers from all four providers and has discussed them with member companies. The offers have been upgraded a couple times and member companies have identified the most preferable provider; member companies are to be switched (some after they end ongoing contracts and/or negotiate with employees).

2. **Setting up a contact platform for identifying potential machinery:** as revealed by initial studies, there is intense need to upgrade equipment. To overcome this challenge, potential machinery suppliers (local and from Hungary and Poland) have been added in order to gain information about the machines and the suppliers, spare parts and maintenance techniques. Further actions remain to intensify work in a thematic group on machinery, maintenance and spare parts management, verification of operating model of the group, support in negotiating with equipment suppliers, support in accessing finance and adding state-support mechanisms and alternative financing mechanisms (e.g. leasing, project finance and equity investments).
3. **Developing a cluster quality brand label on track:** According to initial studies, packaging companies are at different levels of technological progress, company management capacities, quality certificates and conformity with national and international standards. Only a few companies know the European market, which is necessary to develop new business relationships abroad.

Initial steps included development of a [website www.pmag.ge](http://www.pmag.ge) and **social media site, brand logo, communication package (e.g., posters, photo shootings, brand video, business cards)**. The next steps include creating a quality brand label for the cluster and the companies, organizing a workshop to validate the values to be included in the load of the quality brand label for the cluster and according to the selected values, which aspects of law, quality certificates and other standards should be acquired by the companies before they could receive and maintain such a quality label.

Further action will include promoting the quality label, sharing the best practices of companies that went through certification processes and provided the necessary conformity with standards and rules of law, and disseminating information about the companies that have received the quality label.

4. **Strengthening the capacity of cluster members through trainings and consultations:** In 2020, UNDP organized several training programmes and workshops for PMAG and members' staff. **Trainings were organized in areas** of sales, marketing, e-commerce, project management, management psychology, communication and workplace safety. In



2020, PMAG also organized several workshops with Enterprise Georgia, Georgian Berries, the Georgian Blueberry Association, the Georgian Distributors Business Association, the Georgian Furniture Cluster, the Georgian Logistics Association, the Georgian Producers Association and the Georgian Retailers Association.

5. **E-commerce platform initiation:** In collaboration with UNDP and the PMAG Packaging Cluster, a team of e-commerce experts in packaging are developing an e-commerce concept and platform. Currently, packaging manufacturers sell their products through sales agents or via networking. Social media and company websites are not active sales channels. Lacking experience in marketing, member companies generally allocate little to no annual budget for marketing activities. Establishing the e-commerce platform aims to create new opportunities for business success through increased company awareness, easy exchange of product information, online sales and opportunities to enter international markets.

**An e-commerce development workshop was held as part of the capacity-building initiative.** The initiative aimed to develop the skills needed for marketing and sales in local companies and to promote the successful implementation of companies' marketing strategies. The workshop consisted of 10 meetings, the third part of which was dedicated to developing and promoting e-commerce.

#### **Indicator 2.4 % of self-financing of CMO in packaging**

*On Track - Target for 2022 is at least 30% self-financing (does not include donor funding). 15% of self-financing annualized, combining all costs for 2020, 37% self-sufficiency adjusted just for operational costs, 37 member companies financing volume is GEL 74,400 annualized for 2020, while annualized operational costs approximate to GEL 200,000.*

**UNDP continued to support the PMAG Packaging Cluster through low value grant agreements,** supporting the cluster in operations and in member company integration. The cluster will need a continuation of external support to reach a self-financing level of 30% by the end of 2022 and to be able to provide basic service activities for members. For now, combined self-sufficiency reached 15%, taking consideration funding for cluster development and member support. Funding for cluster operation costs reached 37% self-sufficiency.

**The cluster has reached 37 paying member companies, thus generating annual fees of GEL 74,400.** Full member companies (packaging manufacturers) pay an average yearly membership fee of GEL 2,400 (divided into three categories: GEL 1,200 for micro-enterprises, GEL 2,400 for small enterprises and GEL 3,600 for medium and large enterprises). Associate member companies (downstream, upstream and supporting industries) pay an average yearly membership fee of GEL 1,200 (also divided into three categories: GEL 600 for micro-enterprises, GEL 1,200 for small enterprises and GEL 1,800 for medium and large enterprises). Due to membership expansion, CMO operational costs reached GEL 200,000.



Based on current calculations, PMAG achieves around 37% of self-sustainability in terms of covering operational costs. If the PMAG Packaging Cluster attracts at least 60 members by the end of 2021 (around 30 full members and up to 30 associate members), it will reach an income of GEL 97,200 from just membership fees; this represents more than 30% of the minimum yearly operational budget. By increasing the number of members and conducting revenue-generating activities, the CMO target of self-sufficiency could pass the 50% threshold.

The CMO management team will have to be involved in networking activities to further expand membership and regional coverage. Delivering revenue-generating business support services remains challenging and entails specific in-house competencies.

## **2.5 CMO in packaging cluster facilitates extended producer responsibility (EPR) implementation in packaging.**

*The indicator is on track; EPR implementation delayed since the government has postponed passing a decree on EPR for packaging waste.*

Extended producer responsibility (EPR) is a widely used environmental policy approach in which a “producer’s responsibility for a product is extended to the post-consumer stage of a product’s life cycle.”<sup>26</sup> EPR implies that producers should take over the responsibility for collecting or taking back used goods and for sorting, treating and eventually recycling (if possible) when their product becomes waste. The development of EPR systems began in the 1990s and have been implemented in 26 EU member countries and in Canada, Israel, Japan, South Korea, Turkey and other countries.

There are two key features of EPR policies: 1) shifting the responsibility (physically and/or economically, fully or partially) upstream to the producer and away from municipalities, and 2) to provide incentives to producers to take environmental considerations into the design of their products. EPR thus constitutes a policy that is closely linked and derived from the polluter-pays principle — a guiding international principle. This principle stipulates that waste producers and waste holders should bear the costs of waste management in a way that guarantees a high level of protection for the environment and human health. EPR aims to internalize environmental externalities and to provide an incentive for producers to take into account environmental considerations along a product’s life, from design to end-of-life. As such, EPR is to be considered as a major instrument in support of the implementation of the European Waste Hierarchy, which is also a guiding principle for Georgian waste management legislation and is included in the Georgian Waste Management Code.<sup>27</sup>

<sup>26</sup> OECD (2001) Extended Producer Responsibility: A Guidance Manual for Governments, OECD, March, Paris, 164p

<sup>27</sup> Law of Georgia on Waste Management Code



In accordance with the hierarchy, EPR contributes to the increase of (by priority), waste prevention, preparation for reuse, recycling or other recovery (e.g. energy recovery), and waste disposal. Along with other key economic instruments, EPR can encourage a change in behaviour of all actors involved in the product value chain: product-makers, retailers, consumers/citizens, local authorities, public and private waste management operators, recyclers and social economy actors.

Development of EPR-related legislation is ongoing in Georgia. The government has already approved technical regulations for four out of six EPR-specific waste streams: waste from electrical and electronic equipment, waste oils, waste tires and waste batteries and accumulators. There are national targets established to be achieved gradually for the collection, recycling and recovery of the waste. Two more regulations (for packaging waste and end-of-life vehicles) are being currently reviewed by governmental institutions.

According to the requirements of approved and pending legislation, new EPR schemes will be based on the producers' financial responsibility for all activities related to managing the waste generated from the products they put on the market. Technical regulations request that producer responsibility organizations (PROs) and individual compliance schemes "establish a sustainable financial basis, which shall allow for the coverage of the cost of the awareness rising, separate collection and adequate management of packaging waste." Every producer is obliged to make a monetary contribution to the PRO to which it belongs. The contribution is called an "advance recycling fee" and is determined by the PRO in accordance the producer's market share. When calculating the amount of the advance recycling fee, the full product life cycle and the specifications of a particular product or group of similar products should be taken into account. Factors include the durability of the products, their ability to be repaired, reused and recycled, and the presence of hazardous materials in them.

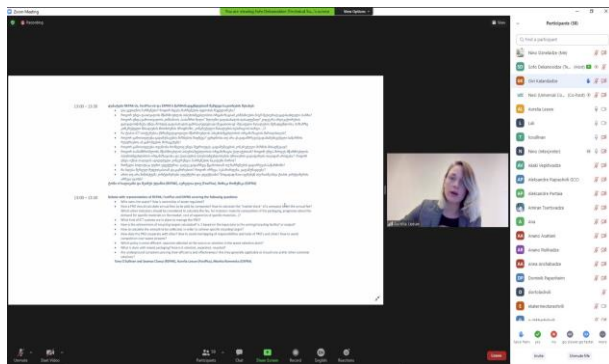
The advance recycling fee should cover all costs of waste collection and subsequent transportation and treatment, taking into account revenues from re-use, from sales of secondary raw materials and from unclaimed deposit fees. The fee should also cover the costs of providing adequate information to waste holders, gathering and reporting data, informing public and conducting awareness-raising campaigns, and PRO administrative costs. In the case of products covered by a deposit scheme, the fee should cover the respective costs of participation in the scheme.

Municipalities can — and probably will — play a very important role in EPR implementation, especially for packaging waste. Successful cooperation among industry-owned PROs and municipalities is imperative for the establishment of a separate collection system for waste packaging within their administrative boundaries. Municipalities and the relevant PROs (to be established in the near future) have to agree on the most appropriate collection separation system, taking into account local particularities and complying with national requirements.



The draft technical regulation introduces an obligatory deposit scheme and refund system for certain products. In a deposit scheme, a product has a specified deposit that is reimbursed to the customer if he or she returns packaging waste generated from that product for recycling purposes. All producers that place soft drinks, beer, energy drinks or mineral water on the Georgian market are obliged to join the deposit scheme.

The export packaging (if export is confirmed by customs declaration), is excluded from the deposit scheme, as is packaging with a volume of more than 3.0 litres or less than 0.1 litres. Draft



technical regulations propose a deposit of GEL 0.20. Deposits are non-refundable if 24 months have elapsed since the product was placed on the market. Producers of the product that is included in to deposit scheme will be obliged to participate in the deposit PRO in order to satisfy deposit related requirements. The member of deposit PRO will transfer to PRO deposit amount, included in the value of every product sold and is intended for distributors to refund returned waste packaging. Additionally,

member producers will transfer to deposit PRO reimbursement of packaging waste (tar) costs incurred by persons involved in the system (service charge for each unit of product).

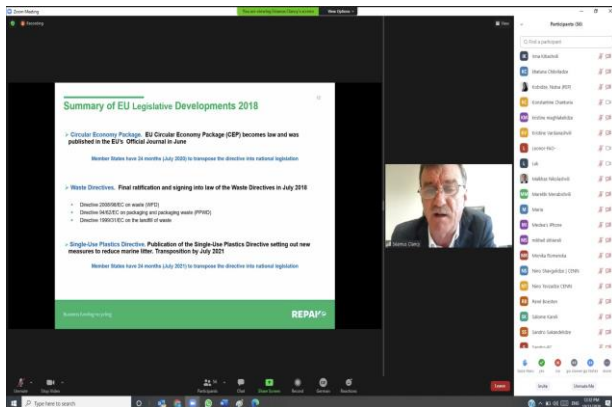
According to the new regulations, certain requirements regarding participation in the deposit scheme are imposed on the distributors of packaged products. , which have been defined as - natural or legal person who places on the market packaged products or uses packaging for filling at sales points, in order to be used or consumed by the public. Specifically, Distributors that place on the market products covered by the deposit scheme (and whose trading area exceeds 200 m<sup>2</sup>) are obliged to allocate space to receive and temporarily dispose of returned packaging waste and to ensure proper operation of the deposit and return system. Distributors involved in a deposit scheme are required to reimburse consumers for each refundable deposit amount. All expenses, incurred by the distributors to satisfy the above requirement, called “cost of service” will be reimbursed by deposit PRO. Costs of service include the cost of reverse vending machines and their maintenance, electricity, additional space and staff.

Reporting in a deposit scheme is based on barcode information. For the packaging of products covered by the deposit scheme, the PRO will be required to design and administer a barcode-based electronic information system. Barcode readers can track each packaging unit from point of sale to delivery point. Producers will be required to mark each product with a barcode before placing it on the market. The barcode should be designed to be able to indicate the information such as the type of beverage presented in the package, brand name of the beverage, type of packaging, capacity, weight, the date of placing on the market, date when the packaging was incorporated and withdrawn from the deposit scheme.

At the inception of the project, **UNDP established the packaging waste EPR cooperation initiative** (with the involvement of institutions, experts and consultants involved in the EPR), and conducted an **analysis of the legal framework of the EPR ecosystem**. In 2020, UNDP continued to present a series of workshops within the initiative. Workshop participants included private, state and donor organizations, the EU Delegation to Georgia, development agencies, CSOs, and local and international experts.

**The PRO models for the packaging sector<sup>28</sup> workshop:** Establishing or being a member of a PRO is one of the most important obligations of a packaging producer. As the EPR principle is relatively new in Georgia, and as it is connected to important obligations, it has generated substantial interest by obliged producers. Matters related to the establishment of or membership in a PRO have been identified as an important challenge and an issue to be dealt with at the initial stage.

To satisfy this demand, an online discussion, European Experience Exchange on PRO Models for the Packaging Sector, was held in 2020. The main objective of the discussion was to give representatives of the packaging industry in Georgia the opportunity to listen to presentations about the successful European PROs and to receive answers on their most pressing questions. Along with business sector representatives, the discussion included officials from the Ministry of Environmental Protection and Agriculture, as it is the main state institution that is responsible for coordination and state control of future PROs in Georgia. In addition, representatives from UNDP, PROs from Belgium and Ireland and the European Extended Producer Responsibility Alliance made presentations and participated in the discussion to convey European experiences of PRO establishment and function.



During the workshop, participants were introduced to various PRO models and the general EU experience. **The workshop addressed the challenges and struggles that Georgia PROs will potentially face, including:**

- The applied operational model (internal structure, cooperation with suppliers and partners);
- Changes and developments made over time (and the reasoning behind them);
- Applied waste management systems for packaging;
- The distribution of responsibilities;
- Coping with differences between cities and rural areas;
- Monitoring the quality of waste streams;

<sup>28</sup> Annex: UNDP Producer Responsibility Organization (PRO) Models for Packaging Sector





- Participating in investments in packaging waste selection and recuperation plants; and
- Organized social awareness-raising campaigns and general recommendations for Georgia.

The workshop continued with practical guidance from European experts on **specific challenges existing in Georgia, particularly:**

- Ownership of packaging waste and its regulation;
- Mechanisms for calculating a company’s annual fees and their market share;
- Indicators to be considered to calculate the fee;
- Specific cases of material composition of the packaging
- Predictions about the demand for specific materials on the market;
- Costs to separate specific materials
- ICT systems in place to manage the PRO;
- Mechanisms to calculate recycling targets;
- The basis of input/output data to the sorting/recycling facility;
- Mechanisms to calculate the amount to be collected in order to achieve recycling targets;
- PRO incorporation and relation to city governance;



- Avoiding overlapping responsibilities and tasks between PROs and city governance;
- Avoiding competition over waste streams;
- Efficient policies (separate selection at the source or selection at the waste selection plant);
- Ways of handling, selecting, separating and recycling mixed packaging;
- The efficiency and effectiveness of underground containers versus other

container solutions.

**EPR in Packaging and Packaging Materials; How Not to Make the Same Mistakes.**<sup>29</sup> This workshop shared Poland’s experiences in setting up and providing an EPR system and PRO insights from experts from the Polish Society for Waste Management. The workshop addressed challenges Georgia will face in the field of EPR and **avoiding mistakes made in Eastern European countries. The workshop also addressed:**

- Fitting EPR policies in the main pillars of the waste management policy in Poland;
- Decisions leading to a system’s success or failure;
- The main challenges to be taken into account when planning a PRO; and
- Observations from other countries.

<sup>29</sup> Annex: UNDP - EPR in Packaging and Packaging Materials, How Not to Make Same Mistakes



As the EPR principle is quite new for Georgia and the implementation of the system is only in its initial stage, it is interesting to learn both positive and negative experiences of different countries. To avoid mistakes, it is important to know about the decisions that contributed to the failure of other EPR systems.

At this stage, producers and other stakeholders in Georgia have a natural interest in an EPR system. In response to this interest, a working meeting was held on 10 December 2020 on the topic “How not to make the same mistakes? Extended Producer Responsibilities in the Packaging Sector.” Support for organizations involved in the production of packaging and packaging materials is one of the pilot directions of the initiative and includes assistance to these organizations in terms of cluster coordination, marketing, innovation and strengthening dialogue between the public and private sectors.

One of the workshop’s main objectives was to provide the Georgian producers in the packaging and packaging materials sector and representatives from state organizations with the opportunity to hear about the EPR system in Europe, particularly in Poland, and the challenges associated with it. Participants had the opportunity to hear recommendations and get answers to questions of interest to them. In addition to the business sector, the meeting was attended by the representatives of the Ministry of Environmental Protection and Agriculture (the agency that oversees and supervises the EPR system). The keynote speaker was Pawel Głuszynski, a representative of the Society for the Earth from Poland. Pawel Głuszynski is a waste management expert with over 30 years of experience working with NGOs to deal with, prevent and safely manage waste generation. Pawel Głuszynski, a specialist in the fields of medical and municipal waste and persistent organic pollutants, shared his experiences in developing legal solutions, preparing national strategies and guidelines, training specialists and implementing pilot programmes.

UNDP closely follows the legal drafting and hearing processes related to EPR, constantly updating its analysis with developments so that it can quickly react and support companies at the regulation or compliance stage.

The following activities are recommended to support Georgian packaging sector businesses comply with upcoming EPR regulations:

- Support producer and importer efforts to establish the legal entity (PRO);
- Develop guidelines for producers/importers on how to prepare documents to establish a PRO;
- Assist in the preparation of files for the authorization of PROs, including assistance in all technical and financial issues, the design of separate collection systems for sorting and recycling, the development of a business model and estimating PRO budgets;
- Develop detailed guidelines on the EPR registry;



- Develop a training module and conduct trainings for PROs covering aspects such as fee calculation, equal treatment contracts for each producer who is a member of the PRO, reporting and contracting with municipalities, retailers, collectors and waste operators;
- Develop a methodology and conduct workshops/trainings on how to achieve targets and how to calculate target achievement;
- Conduct workshops/trainings on implementing the methodology to achieve targets; and
- Hold consultation meetings for supportive dialogue with the private sector in the process of establishing and implementing the EPR system.

As the EPR concept is still new in Georgia, significant awareness-raising efforts are needed in order to increase the understanding of stakeholders and the general public on the needs for and benefits of an EPR system. The increased awareness and understanding will, in turn, promote buy-in and engagement from all relevant stakeholders in the process of the EPR implementation.

## 2.6 No. of priority needs solved in CMOs

*The target for 2022 is 20 (in total for packaging and seeds and seedlings sector). Result for 2020 is 15 needs (for packaging cluster).*

**Based on preliminary studies, 15 actions were undertaken during the reporting period to address needs in six areas:**

- I. **CMO development and international best practices**
  1. CMO business strategy and corporate governance
  2. Participation in international exhibitions
  3. CMOs in the EU and Associate States packaging sector
- II. **Vocational training and capacity strengthening**
  4. Analysis of training needs and development of vocational training courses for company personnel and people in the labour market
  5. Marketing and sales promotion training
  6. Project management training
  7. Management psychology and effective communication training
- III. **Environmental protection and resource efficiency**
  8. Promotion of environmental protection measures and resource efficiency
- IV. **Occupational safety**
  9. Series of occupational safety regulations and COVID-19 measures, trainings and workshops
  10. Labour safety certification workshop
- V. **Biodegradable packaging**
  11. Regulatory review of the production, import and use of plastic and biodegradable bags in Georgia
  12. The road to biodegradable packaging in Georgia
  13. Approximation of the packaging sector related to Georgian legislation to EU
- VI. **Sales and marketing**



14. Export promotion Argo Export Exhibition
15. International market research studies

In 2020, UNDP undertook the following actions under each area:

1. **CMO business strategy and corporate governance:** after setting up effective corporate governance mechanisms for the CMO, the PMAG Packaging Cluster started implementing its strategy in the second quarter of 2020. The COVID-19 pandemic caused some difficulties in reaching potential new members. Nevertheless, the CMT, supported by the UNDP team, provided analyses on the impacts of COVID-19 on companies in the packaging value chain. Activities were rearranged to incorporate online meetings and workshops. Participants have been actively involved in cluster initiatives. The CMT has been preparing and executing actions in line with the strategy, including those supported by UNDP.
2. **Participation in international exhibitions:** Upon invitation from the Polish Natureef Cluster,<sup>30</sup> from 3 to 5 March 2020, the **PMAG Packaging Cluster participated in Warsaw Pack 2020**. During the visit, several workshops and networking events were held. The Georgian delegation had a chance to get introduced to similar clusters from the EU, share visions and contacts and plan future collaborative projects. A number of important topics were raised during the conference devoted to innovations in packaging, such as minimization in packaging; solutions for improving the usability of foil and flexible packaging for recycling; sustainable packaging made of plastics and multilayer, recyclable packaging; innovations in logistics and in the food industry as a chance to reduce food losses and cost effectiveness of companies; and eco-design as a way to reduce costs in a company (with and example from the cosmetics industry).

It was particularly interesting to get acquainted with Polish experiences in terms of packaging waste management, as similar EU directives are in the process of being implemented in Georgia. The PMAG Packaging Cluster also visited the WarsawPack Expo. The Warsaw Pack trade fair consisted of six thematic zones: packaging techniques; packaging; labels, labelling and printing; automation; e-commerce; and logistics and storage. During the event, food, cosmetics, pharmaceutical, chemical, transport and industrial packaging were presented, as were packaging and packaging machines, a wide range of labels and labelling machines.

The Expo was enriched by conferences, competitions and a special zone conducive to business contacts. The event was another great opportunity to meet companies from all over the EU, which could be beneficial for PMAG Packaging Cluster member companies. Our delegation has gathered contact information, business cards and catalogues from the WarsawPack Expo, which will be used to create a special catalogue for PMAG Packaging Cluster members.

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<sup>30</sup> [www.natureef.pl](http://www.natureef.pl)

After the visit, PMAG created and shared a Polish contacts database with its members, including companies and organizations from areas such as machinery, paper, cardboard, plastic, printing, palletizer, forklifts, food-related, waste, steel, sealing, strapping, labelling, marking, banding, liquid, transportation, logistics, distributors, other/packaging companies, packaging and association/clusters.

**3. CMOs in the EU and Associate States packaging sector:**<sup>31</sup> To research the best practice experiences of European packaging clusters, the project developed profiles of EU cluster



organizations and a study report to summarize findings and provide recommendations for Georgia packaging cluster development. **This study contains:**

- A summary of the different business models of CMO in the EU and Associate States packaging sector;
- A description of products and services offered by CMOs in the EU and Associate States;
- The possibilities of implementing mentioned CMO products and services in Georgia;
- The value proposition for perspective companies for CMO membership; and
- A database of the CMOs in the EU and Associate states packaging sector.

**4. Analysis of training needs and the development of capacity-development programmes** (business management vocational training courses for company personnel and people in the labour market). Vocational skill needs have been identified, needs that encompass a range of technical and business managerial competencies. **The top six technical competency needs include** production management and logistics; automation and robotization; production process planning; waste management and recycling; labour safety; and quality management standards. **The top six business management competency needs include** marketing, sales management, leadership and management, project management, digital marketing and stress management. Accordingly, series of training courses have been launched.

**5. Marketing and sales promotion trainings:** To increase the capacity in sales and marketing for packaging cluster member companies, the project organized 2–3-hour 8 online training sessions where **42 participants from 23 organizations** got acquainted with **advanced sales and marketing principles**. The training covered advanced topics such as strategic marketing, branding, online sales marketing, marketing research and packaging as a marketing tool. The training supported packaging value chain companies in sales and

<sup>31</sup> Annex: UNDP Report on CMOs in Packaging Sector in EU and Associate States



marketing. The trainings will stimulate the implementation of joint actions to deal with post-pandemic challenges, to overcome vulnerabilities of established sales channels, to shift to digital sales and to strengthen marketing capacity. Participants gained knowledge and practical guidance on how to market their products and services in changing realities, how to stimulate sales and how to transform sales to digital platforms.

Following participant feedback, **UNDP will shape e-commerce concepts for packaging supply chain companies** (based on which e-commerce platform will be developed) as an alternative sales channel, thereby enabling them to utilize new, digital opportunities.

**Feedback Evaluation:** More than 50% of participants rated the course with 'highest' excellence evaluation. Up to 100% of participants stating meeting its expectations. 100% of participants confirmed that they will change marketing practices after the course (completely for 10% of participants, substantially for more than 60% of participants, medium for 20% of participants and mild for 10% of participants).

6. **Project management training:** UNDP organized 40-hour project management training courses, which presented advanced project management skills for planning, managing and successfully implementing projects. Training was attended by **35 participants from two groups (Rural Development Agency and PMAG)**. 90% of participants rated the course with the highest evaluation, 70% of participants stated it met their expectations, and 100% of participants confirmed that they will change managerial practices after the course (substantial change for 30% of participants, medium change for 50% of participants, mild change for 20% of participants).
7. **Management psychology and effective communication training:** Under the management training capacity-strengthening initiative, the project delivered five ten-hour online training sessions on management psychology and effective communication to cluster members' staff and management. Proper communication is one of the key challenges for effective management. The main questions answered during the training session revolved around employee motivation and how to increase motivation using psychological techniques. The training was attended by **39 participants from 22 packaging value chain companies**.

Strengthening management capacities and implementing optimal management systems for member companies is designed to unleash the full potential of personal and overall achieve meaningful results. The training strengthened management capacities, developed communication strategies, supported the implementation of motivation systems and, overall, improved corporate structure to maintain positive attitudes and to build businesses. Improved businesses will bring welfare and utility to all stakeholders, including investors, managers, employees, customers, suppliers and communities.

**Feedback Evaluation:** More than 80% of participants rated the course with the highest excellence evaluation, and more than 10% as good. Close to 100% of participants stated the training met its expectations and more than 90% of participants confirmed that they will change managerial practices after the course (complete change for 20% of participants, substantial change for more than 50% of participants, and medium change for 20% of participants).



**8. Promotion of environmental protection measures and resource efficiency:** UNDP encourages environmentally friendly production to ensure that the requirements of environmental legislation are observed and complied with by all operators, including packaging manufacturers whose activity might cause environmental impacts.

Last year, the project team elaborated the **Methodology for Scanning of Environmental Performance of Packaging Manufacturing Companies**. The Methodology includes a description of a system to scan and assess the environmental performance of a company's plan to prevent/minimize pollution of its activities. Using the proposed methodology will help companies reduce the environmental impacts of their operation. It will help establish a system of continuous self-monitoring, self-evaluation and reporting, which will enable the company to conduct comprehensive cost-benefit and other economic analyses.

Initial studies and discussion revealed that companies are not well prepared to address environmental issues. It is expected that the control and monitoring system will scope on the situation in the companies as Georgia is implementing the European environmental protection standards.

The PMAG Packaging Cluster joined the celebration of World Environment Day by promoting the 'Together we will Help to Preserve Biodiversity' activity. With the initiative of the cluster and UNDP support, 200 eco-friendly gift sets were prepared and distributed to companies across the industry, to international and non-governmental organizations, to educational institutions and to other businesses across Georgia. In accord with the biodiversity theme of this year's World Environment Day, the gift sets included native plants and eco-friendly products produced in Georgia. The aim of the action was to emphasize the involvement of private companies in maintaining biodiversity in Georgia. To reduce environment impacts, PMAG members paid particular attention to the efficient use of energy, water and raw materials. With this in mind, PMAG is trying to choose an eco-friendly raw material for the production, or to process the recycling to produce the raw

material itself. In addition, to implement water and energy efficiency policies in each unit of cluster.

- 9. Occupational safety and COVID-19 measures:** Strengthening occupational safety systems and raising the level of management are critical to developing and strengthening organizations as a whole. Especially in current pandemic conditions, it is necessary to take occupational legal issues into account (particularly those that relate to pandemic responses). The first initiative under the occupational safety project touched upon COVID-19. It was held as an online webinar on 14 May 2020 and **attended by 57 participants.**

**Labour safety regulations:** The initiative continued with occupational safety training on the requirements and obligations of the Organic Law on Occupational Safety. The training, conducted by the Employers' Association, focused on adapting to the current situation. It covered topics such as conducting economic activities; observing safety norms for employees and consumers; getting acquainted with the rules of conduct, regulations, and directives; and arranging the work environment in accordance with activities.

The training module presented the purpose, subject and scope of the law; general employer obligations; employee rights and obligations; the rights and obligations of other persons in the workplace; general grounds of responsibility; legal responsibilities; and the need for risk and threat assessments. The first stage of the training was held on 1 and 2 October 2020 at the Tbilisi Technopark and attended by two groups of more than 25 people. The second stage was held on 6 October 2020 in Kakheti, Telavi. The one-day training event was attended by 35 people.



- 10. Labour safety certification workshop:** With UNDP support, the PMAG Packaging Cluster launched a thematic initiative to provide training



about the occupational safety system and management. The target segment of the initiative was decision-making executive managers and managers working in the field of occupational safety. The leading consulting company, licensed by the Institution of Occupational Safety and Health (IOSH; a leading international organization for occupational safety) was invited to implement the initiative. The company has been running an accredited occupational safety programme since 2017. The founders of the company are BP's current occupational safety advisors, ISO 45001 licensed auditors, and holders of NEBOSH, BOHS, and numerous other international



certifications. Invited experts conducted training with interested companies based on IOSH materials from **IOSH (Institution of Occupational Safety and Health)** on labour safety system and its management provided by law. The course consisted of two stages. The first stage spanned five days (three hours per day) via the Zoom platform. The intensive sessions fully covered the theoretical aspects of the course and included a practical assignment (preparing a risk assessment matrix for a project). Participants performed the risk assessment project independently. After experts checked the assessments, they scheduled individual meetings with each participant in order to discuss the project submitted by them. Participants were provided with recommendations on how to improve and regularly update the risk assessment document. As a result, participants have a certified risk assessment document.

After the training, 25 company representatives were awarded a bilingual certificate of proficiency in the system. Participants were also given two-week access to all online courses by



the Safco Academy (work at height and safety equipment, chemical hazards and working with hazardous substances, electrical safety, emergency management, fire safety and personal protective equipment), which allowed them to increase their professional knowledge and gain a more comprehensive understanding of the field of security.

**The second stage of the training was completely practical.** As part of the first output of initiative, **12 companies created a labour safety risk assessment matrix**, a guide for company management for running operations safely. The matrix describes priority risks, weighs impacts and probability of occurrence, accounts for mitigation measures and assigns responsibilities. The documents need to be updated periodically according to lessons learned and new developments within the organization.



Upon completion, 84% of participants committed to changing (completely or substantially) operational practices within their enterprises.

**11. Regulatory Review of the Production, Import and Use of Plastic and Biodegradable Bags in Georgia:**<sup>32</sup> Plastic packaging, especially lightweight plastic carrier bags, are a major source of litter,

<sup>32</sup> Annex: UNDP Regulatory Review of Production, Import and Use of Plastic and Biodegradable Bags in Georgia



environmental damage and are an inefficient use of resources. In Georgia, environmental pollution with plastic bags is a critical issue. In European Countries plastic bags have been targeted to specific measures at both, EU and national levels, including imposing bans, charges or setting national maximum consumption targets. Also in Georgia, environmental pollution with plastic bags is a critical issue. Often, after use, improperly handled plastic bags appear in streets, residential and recreation areas or nature causing a nuisance for humans and a threat to biodiversity in terrestrial, freshwater and marine ecosystems. European countries (at the EU and national levels) have taken targeted measures to address plastic bags, including imposing bans, charges or setting national maximum consumption targets. The Government of Georgia is addressing the problem by implementing regulations that prohibit the import, production and selling of plastic bags and by promoting biodegradable and compostable bags. The relevant legislative changes had been introduced gradually.

Prohibition regulations had an obvious impact on companies that engaged in the production, importation or use of plastic bags. Unfortunately, no impact analyses of the prohibiting regulation was conducted. These companies face challenges in insuring compliance and require assistance in shifting towards biodegradable or other alternatives. The obliged industry refers to difficulties in the enforcement of the regulation; certain allegations have been made regarding counterfeiting production, and prohibited plastic bags being still heavily present in Georgian markets. By fostering unfair competition, this creates unfavourable conditions for compliant companies.

Nevertheless, some positive behavioural changes can be observed. In supermarkets, bags are no more offered free of charge; large chain stores sell textile/canvas versatile bags at cashier's desks; some bookshops and pharmacies have shifted towards paper bags; and delivery companies are increasingly using paper bags. The textile bags are gradually becoming more popular.

**The Regulatory Review summarizes the associated legislation, its scope, applicability and existing exemptions.** It describes prohibitions on plastic bags and rules on biodegradable bags and discusses labelling requirements and the provision of information to consumers. The Review also explains current enforcement systems and governmental control, including the penalties for non-compliance. It also defines applicable technical standards and the proof of compliance.

**12. The road to biodegradable packaging in Georgia:**<sup>33</sup> In recent decades, the consumption of plastic packaging has significantly increased in the world and in Georgia. Disposable plastic products have become an integral part of our daily lives. Consequently, the amount of plastic waste is constantly increasing. It is well known that plastic pollution is one of the biggest

<sup>33</sup> Annex: UNDP Report Road to Biodegradable Packaging in Georgia

global challenges. In response, increasing attention is being paid to finding alternatives to traditional plastics — particularly in packaging made from bioplastic materials.

The global bioplastics industry is growing dynamically and is expected to grow by 15% over the next five years. 53 percent of the bioplastics produced in the world (1.14 million tons) are used as packaging materials. ‘Bioplastic’ is defined as plastics that are biodegradable, biobased or both. Biodegradable plastics are plastics that can be decomposed by microorganisms in the environment. Microorganisms use biodegradable plastic structures for food and turn them into water or carbon dioxide. As a result, bioplastics are much less damaging to the environment than traditional plastics, which can take decades to decompose.



The issue of reducing plastics is receiving more attention in international discussions related to climate change and the transition to a circular economy. Georgia has seen a growing interest in bioplastics in recent years. In addition to global trends, this interest is also related to gradual legislative changes in the country since 2018 that have affected the packaging and packaging materials sector, particularly the production and import of polyethylene packaging bags.



As a result of these shifts, as of April 2019, the production, import and sale of plastic bags of any thickness and oxo-degradable bags are prohibited in Georgia. Only biodegradable and compostable shopping bags that meets certain standards can be produced, imported and sold in the country. With the introduction of this regulation and the international dynamics, the interest in biodegradable materials in Georgia has increased. In order to satisfy this interest, the working meeting ‘the Road to

Biodegradable Packaging in Georgia’ was held on 30 November 2020.

One of the key goals of the working meeting was to give Georgian entrepreneurs in the packaging and packaging materials sector the opportunity to hear presentations by well-known professors and experts in **biomaterials and, in particular, bioplastics**. The meeting was also an opportunity for participants to learn about current approaches (and future



perspectives), policies and challenges in Europe. Participants also got information from — and posed questions to — bioplastic package manufacturers. The meeting was also attended by representatives of the Ministry of Environmental Protection and Agriculture. Together with municipalities, this agency is responsible for enforcing the ban on plastic bags.

One of the principles of waste management in Georgia is the promotion of waste prevention in general, including plastics. Replacing traditional polymers with biodegradable polymers is an important factor contributing to the prevention of plastic waste generation from packaging. The project initiative to exchange examples and experiences of international practices in this area was welcomed by participants, among them representatives of the public and private sectors.

- 13. Approximation of the packaging sector related to Georgian legislation to EU:**<sup>34</sup> The most important precondition for Georgia's integration into the EU economy is legal approximation and the introduction of European standards. The successful implementation of these standards will reduce trade barriers, deepen business relations and bring more economic benefits to the country. The readiness of relevant business sectors for timely and effective implementation of the legislative framework regulating various sectors of the economy plays major role. It is important to have an ongoing dialogue with entrepreneurs who are directly involved (or will be in the future) in fulfilling obligations under the EU Association Agreement.

The legislative changes provided for in the Association Agreement apply to almost all sectors, including the production of packaging and packaging materials. The preparation of this document, 'Approximation of Regulations Related to the Packaging and Packaging Materials Sector with the EU', is preconditioned on the need to help entrepreneurs move to new standards that are closer to European legislation and standards.

This primarily refers to the provision of information on directives and regulations that are to be implemented within the framework of the obligations accepted under the Association Agreement — and which are directly related to the production of packaging and packaging materials. Accordingly, **the document reviews and clarifies the specific provisions of the European directives and regulations to be transferred to Georgian legislation from 2020 to 2026**, their goals, scope and regulated content. It also reviews the process of legal approximation work in Georgia, describes the institutions responsible for the approximation and the enforcement process, and sets a timetable for setting new legislative requirements. This information is also summarized in an infographic that provides a unified, complete picture of the legislative approximation.

<sup>34</sup> Annex: UNDP Approximation on Packaging Sector with EU

**14. Export promotion Argo Export Exhibition:** Expo Georgia, the leading exhibition centre, organized the Business-to-Business Forum on Agriculture and Food Industry Export. The main purposes were to promote the agro and food industries and to find/expand sales channels in local and international markets. UNDP supported PMAG and its members' participation in the forum. Forum panellists included representatives of ministries, international agencies and the banking sector. The panel discussion topic was agricultural development plans and opportunities after the pandemic, which included the following areas: the agro and food industries, anti-crisis planning, export trends, access to finance and private- and state-sector opportunities, and support mechanisms to facilitate the internationalization of agri-food products. Within the online Forum format, exporters and selected buyers got acquainted with the list of Georgian companies and products in advance and scheduled online meetings.

**15. International market research studies:** To explore the potential of international markets, development trends and demand, and to promote the export of packaging products from Georgia, the project identified and provided access to PMAG on some packaging studies of European and world markets.

## Output 2. Development and functioning of cluster approach in the seeds/seedling sectors (FAO)

### Indicator 2.2 Number of companies who are part of the CMOs in the seed and seedling sector:

A preliminary study on the identification of potential members and possible points of collaboration and engagement has been conducted by FAO. Different sector databases and additional research on other related sectors, supporting industries and the extended value chain



were used. The baseline survey already showed that the knowledge of the concept of a cluster is unknown to the entrepreneurs and farmers operating in the nursery sector. Hence, it was decided to raise awareness by conducting a series of meetings with different identified nurseries and other stakeholders to provide information on the concept of a cluster, how clusters operate in other countries, benefits of engagement in a cluster, ways of collaboration, role of CMO, sustainability, etc.

As a result, to date, the Association has a total of 11 member nurseries, and five more submitted their applications to become a member and are in the process of being approved by the board. Additionally,

14 other stakeholders related to the sector have shown interest on being part of the cluster. The main categories identified to have interest in collaboration and their possible role are as follows:



**Farmer associations:** Farmer associations will help the sector mainly with awareness raising and promotion of the association amongst their members, as well as sharing contact details to members as potential clients of nurseries. The main stakeholders in this category who are operational and expressed their interest in the cluster are: Georgian Farmers Association, Women Farmers Association, Hazelnut Growers Association, Almond and Walnut Producers Association and Georgian Wheat Growers Association.

**Individual firms** (value chain stakeholders): This category comprises representatives of the private sector individually along value chains and in related industries, such as ltd-s and individual entrepreneurs. Such firms are mainly farmers, producers, potential customers of nurseries, restaurants, and packaging companies.

**Education and research institutions:** Various universities (Batumi Shota Rustaveli University, Akaki Tsereteli State University, the Agrarian University, Georgian Technical University (GTU) and Iakob Gogebashvili Telavi State University) are open to internship-related collaboration with the Association. Also, laboratories at the disposal of universities can offer some laboratory services.

**State agencies:** The state agencies' participation in the cluster is very important to ensure coordination and to provide regulatory information on the sector. Those of relevance for the seed and saplings sector that may be considered are mainly the Scientific Research Centre (SRCA), the State Laboratory of Agriculture and the National Food Agency.

**Communication:** Television channels or journals specialized in agricultural programmes, attracting viewers who are interested in the sector, can be very beneficial for the cluster. They could cover any event, e.g. a training around demonstration plots, for the promotion of the cluster or for the propagation of domestic healthy plant production/consumption.

**Other clusters:** One identified cluster which can be considered for collaboration is the packaging cluster, organized and represented by UNDP under the same current project. Nurseries represent direct potential clients for packaging companies, as the CAC (Conformitas Agraria Communitatis) qualification and certification systems will drive the need for packaging materials, labelling and plant passport for marketing and distribution in Georgia. The survey conducted on sapling production in Georgia revealed that the total number of fruit saplings produced by interviewed nurseries exceeded 10 million units in 2019. Even though not all nurseries will be able to qualify, the demand on packaging materials for either individual saplings, or batches will still be noteworthy and will represent a lucrative opportunity for packaging firms. In addition, according to the National Wine Agency, the estimated demand for grape vine rootstocks (for wine making) per annum is around ten million vines, without taking into consideration the ones for table grapes. The Scientific Research Centre of Agriculture (SRCA) of the Ministry of Environmental Protection and Agriculture (MEPA) of Georgia



foresees a similar level of demand on fruit tree rootstocks. Therefore, the demand on packaging will indeed be high.

As for the **international projection of the cluster**, an application on membership has been made to become part of the International Seed Federation (ISF). Both the importing of new varieties to Georgia as well as access to export markets will be facilitated by being a member of ISF. Formal recognition of membership will happen during the ISF General Assembly in July 2021 during the ISF World Seed Congress in Barcelona. The Association will be entitled to join the ISF World Seed Congress in Barcelona, 5-7 July 2021. ISF World Seed Congress is the flagship event of the global seed industry that typically attracts around 1200-1700 delegates each year. This three-day event is an opportunity to develop industry knowledge and networks, as well as to negotiate trade agreements. ISF membership also gives access to the Closed Meetings of the ISF Congress.

**International companies:** Some international companies that can provide useful services to the sector are being identified to be invited to take part in the cluster. This is the case for a Dutch laboratory that can provide DNA analysis unavailable in Georgia, or Plants365 Ltd., a British company interested in bringing new berry varieties to Georgia through a collaboration with GEOSSA for the support on registering in the national catalogues and protecting them, after which the varieties can be commercialized.

### **Indicator 2.7. Establishment of National Seedling Certification system:**

Agriculture can be a significant driver of growth, export improvement and poverty reduction. The low levels of current yield offer an opportunity to improve productivity, create employment and increase exports for the sector to be a large net contributor to economic growth generally. The quality of seeds and seedlings is probably the key underperforming factor where considerable improvement (in yield per hectare) can be achieved with a relatively easier effort. Currently, there is no quality control and management system in place in Georgia for fruit plant and grapevine nurseries. Producers, therefore, set up and manage the nurseries according to their personal understanding without following any standards, which eventually translates into poor quality material, dilution of the concept of genetic trueness-to-type (varietal identity), and spread of harmful organisms. As a result, the nurseries, due to the lack of trust for the quality of the locally produced planting material, are obliged to introduce rootstocks from abroad every year and graft them in the country. This creates a significant constraint for the development of the private sector, generates higher costs and reduces the income of small and medium entrepreneurs.

The project is consolidating efforts toward the implementation of a National Sapling Certification system for fruit trees and grape vines that will improve the phytosanitary conditions and will approximate the vegetative material to European standards, raising its trustworthiness on the local and global market and bolstering the growth of Georgian export.



To this end, the following set of actions is being implemented:

- Definition of the set-up of the certification system in view of international and EU legal framework.
- Preparation of legal framework necessary to set up the certification system.
- Support to certification bodies on the implementation of the certification system.
- Technical support to nurseries to facilitate their process of complying with the requirements of the qualification and certification system;
- Facilitate the availability of basic services and quality/clean material needed by the nurseries to meet the requirements of the process of qualification of nurseries and certification of material.

### Definition of the set-up

As per the obligations under EU-Georgia Association Agreement, after 2024, only certified fruit plant propagating material and fruit plants intended for fruit production (Council Directive) should be allowed to be marketed in Georgia. As stipulated by the Council Directive 2008/90/EC of 29 September 2008, it is necessary to set up a seedling certification system that can be used in a voluntary basis before this regulation enters into force.

A review of the specific nursery-related situation in Georgia has been performed, and based on the European certification system model, it suggested the set-up of the Georgian nursery material certification system according to the following scheme:

General outline of the Process:

1. Qualification and Registration of Nurseries (List, Register + Requirements)
2. Register of varieties permitted for distribution on the territory of Georgia
3. Plant Passport and labelling

Certification process:

1. CAC (mandatory) and CE Certification (voluntary)
2. Inspections: definition of technical and administrative aspects

National Register of Qualified Nurseries for the producers of fruit plant propagating material: minimum requirements -

a. Administrative

1. Ensure qualification in plant production and related plant-health matters of the owner, administrator or designated technical officer of the nurseries

b. Technical

1. Register of plant movement (Nursery Operations Register)
2. Register of movement of fruit plants or propagation material in, out and within the nursery (Nursery Plant Register)
3. Internal and official visual inspections of plants for symptoms of pests or diseases
4. Reorganization of nurseries
5. Setting up of one or two screen houses for the maintenance of healthy propagating material
6. Other requirements related to the management of qualified nurseries





Additionally, a series of coordination meetings with Ministry of Environment Protection and Agriculture (MEPA), Scientific-Research Center of Agriculture (SRCA), National Food Agency (NFA), and Laboratory of the Ministry of Agriculture (LMA) have been held in order to formalize the framework and the structure of the system, including the definition of state bodies' responsibilities based on existing legal regulations and actual capacities to implement the Certification process - nursery qualification, CAC category of planting material and issuance of plant passports, and issuance of quality certificates for planting material.

The final validation meeting was attended by Giorgi Khanishvili, First Deputy Minister of the Ministry of Environment Protection and Agriculture of Georgia. The meeting aimed to present a model for the division of the competencies developed, based on the preliminary discussions and consultations with NFA, SRCA and LMA, review European models, agree on a common position and approve the final model for the division of the competencies.

As a result, the definition of the competencies of state bodies was agreed and endorsed, and a document was drafted to accompany the Decree in the form of an Annex.

### **Preparation of legal framework**

The legislative approximation is the cornerstone of trade relations between Georgia and the EU, creating the basis for establishing regulatory equivalence.

Georgia has currently in place a series of legal instruments regulating the production and commercialization of plant varieties and related material, however, none of these is specifically tailored for fruit propagating material and related specific features, such as separate consideration of rootstocks and varieties and their way of vegetative propagation. In addition, nursery management and qualification are not taken into account by the current legal framework. The intention of the Project is to adjust current Georgian legislation in such a way that allows fruit nurseries to produce and market their material in harmony with international and EU legislation.

In this regard, the certification-related legislative framework aligned to the EU is being created. As a first step, FAO conducted an initial legal review of the ongoing system in view of international and EU legal framework. The following legal acts have been analysed:

- Law of Georgia on Permission for Distribution of Agricultural Plant Species Subject to Mandatory Certification,
- Seed Law, including all relevant bylaws.
- Obligations under EU-Georgia Association Agreement.

The following conclusions derived from this Legal Review:

- Georgia has a series of well-done Laws and other legislative texts in place, which cover a large part of the distribution, certification and phytosanitary requirements for seed material. However, this legislation does not consider fruit plant and grapevine nurseries;



- An outline of the system should be developed along with the set of requirements for participating parties including the definition of the authority/institution in charge of the system;
- Preparation of legal provisions necessary to set up the certification system:
- A new governmental decree to establish the national regulatory framework for Georgia in the subsector of fruit and grapevine planting material intended for the production of high quality planting material, assigning overall responsibility for the correct implementation of the production rules according to a quality system (CAC);
- A set of provisions for already existing regulatory acts that will need to be amended;

As a follow up of the Legal review and based on a series of consultations with deputy ministers of MEPA, relevant authorities from SRCA and NFA, legal national and international experts, and other relevant stakeholders, the project supported the drafting of a new “Decree of the Government of Georgia On qualification of Nurseries for production of plant propagating material and fruit plants intended for fruit production”.

The proposed decree sets forward new requirements for the qualification of nurseries, that should serve as part of a set of implementing provisions related to the “Seed Law” which regulates the conditions for production and marketing of seeds and plants for planting on the territory of Georgia, in line with the GEO-EU Association Agreement.

The Decree covers two aspects necessary for the implementation of the system, namely quality assurance procedures during the process of production of fruit plants or plant propagating material and phytosanitary procedures and controls of the material.

The first Governmental Decree on nursery qualification has been discussed, agreed and drafted in close coordination with relevant authorities of MEPA. The facilitation of the process of adoption by the Government of Georgia and the Parliament of Georgia is ongoing, and it is expected to be completed within the coming weeks.

The production of a set of legal provisions will follow the approval of the Governmental decree - Ministerial Decrees, Regulatory Acts and Bylaws complementing the Decree and necessary for the establishment and functioning of national seedling certification system. The legal provisions to be amended have been already identified and are the following:

- Law of Georgia
  1. On permission for the distribution of agricultural plant species subject to mandatory certification and on seed production
- Decree of the Government of Georgia
  1. Decree No. 411 approval of the list of agricultural crops subject to mandatory certification
  2. Decree No. 118 approval of the fee for certification of seeds and planting material of agricultural crops subject to compulsory certification by the authorized body of the Ministry of Environment Protection and Agriculture of Georgia
- Order of the Minister of Environment Protection and Agriculture of Georgia

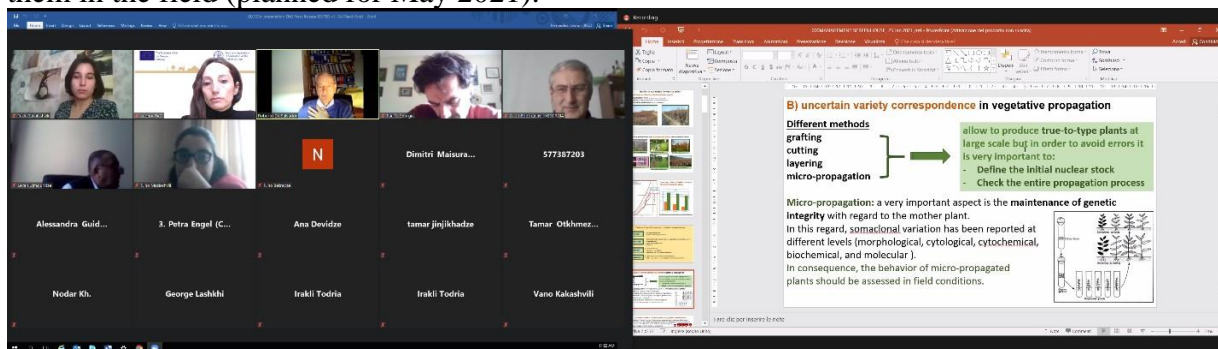
1. Order No. 2-1038 On approval of national catalogue of agricultural crop varieties permitted for distribution on the territory of Georgia and the rule for producing the catalogue
2. Order No. 2-51 On approval of regulation of Legal Entity of Public Law - Scientific-Research Centre of Agriculture.
3. Order No. 2-107 On approval of Regulation of Legal Entity of Public Law - National Food Agency
4. Order No. 2-155 On approval of the Regulations of Legal Entity of Public Law Laboratory of the Ministry of Agriculture of Georgia

### Support to certification authorities (NFA, SRCA, LMA)

A training programme has been developed to strengthen the capacities of the certification authorities. The following trainings are being organized:

- Training of SRCA and/or NFA staff on administrative procedures for application/issuing certificate.
- Training to SRCA and NFA on technical methods of field inspection (rootstocks, mother plants for scions, seeds for vegetable seedlings): administrative control, visual inspection, sampling;
- Training of LMA on Laboratory analyses: variety identification, detection and identification of pests (particularly viruses);
- On-site training on the first stages of the qualification of nurseries, in a learning-by-doing approach.
- Training to SRCA for the establishment of a virus-elimination system (thermotherapy)
- Training to laboratory staff on detection and identification of viruses.

Most of them have been already conducted (through Zoom due to COVID-19 related restrictions) while others are on hold until the restrictions are lifted due to the need to deliver them in the field (planned for May 2021).



Also, a Study visit for both NFA and SRCA respective authorities to producer organizations and institutions involved in the plant certification process in other countries was organized.

NFA and SRCA authorities visited different institutions in Italy such as the Department of Science and Agro-Food Technologies of the University of Bologna, the Centre for fruit crop



certification – CAV, the Research Centre for Viticulture and Enology, the Department of Science and Agro-Food Technologies, several nurseries, cooperatives and private companies.

The topics covered during this study visit were, among others:

- Aspects of plant pathology, such as biology, symptomatology and diagnostics of the major infective diseases of crops (caused by virus, viroid, bacteria and fungi) and of the abiotic stress alterations,
- Application of the EU, national and regional regulations.
- Territorial monitoring,
- Application of “compulsory control Decrees” for some pests and diseases.
- Inspections and certifications.
- Quality production of healthy plant material.
- Quarantine (i.e. screen houses) and field facilities for Pre-basic material conservation and the production of post-assay and indexed healthy Basic (mother) plants for its associated partners and outside customers in compliance with national, EU and international certification standards and schemes;
- Laboratory instrumentation and diagnostic methods; Plant health assays for certification and registration of grapevine and fruit trees (strawberry, olive, grapevine, kiwi, hazelnut, walnut, pistachio, artichoke, pomegranate, citrus and vegetables);
- Micro propagation of plants, including rootstocks in in vitro culture - a high-tech nursery method for the vegetative propagation of plants.
- Productive cycle: micro propagation in a laboratory, transplanting into a greenhouse, acclimation and growth in shaded area.
- Greenhouse management.
- Nursery field cultivation of rootstocks and grafted fruit plants in open field;
- Rootstocks and fruit tree propagation in vitro following the process of certification;
- Production of different type of material CAC (Community agricultural conformity);
- European Certification
- Planting distance, training systems for mother plant and fruit variety collection;
- Propagation techniques (in vitro and traditional), production of rootstocks and grafted material of wine and table grape varieties
- Greenhouse and field management;
- Chain quality and sanitary status control
- Innovation: rootstocks, varieties.
- Ex situ conservation of wine and table grape;
- Traditional and molecular characterization of varieties.
- Grapevine conservation, propagation, cultivation.
- Management and updating of National Grape; Variety Catalogue, and the relative collection field;



Certification authorities are already involved in the process of setting up the system. Joint filed trips to nurseries are taking place, where SRCA has been inspecting conditions and operations for evaluating the qualification requirements, while the Association was discussing with the nurseries their potential membership and how the nursery could benefit from that membership.

Additional support was provided to SRCA by coordinating their needs of developing the electronic database of national plant catalogue and general registry for nurseries and seeds producers, and liaising with the International Organization for Migration (IOM) to link this activity to the Georgian Diaspora. IOM, in the framework of the EU funded project, has provided contact details of Georgian diaspora representative proficient in website and database development. Communication has been established and development of the database is ongoing.

### Technical support to nurseries

**1. Trainings:** General and individual support to nurseries is also part of the project strategy. The project has developed a specific training programme, including the following topics:

- Training on legal requirements and administrative procedures;
- Establishing the CAC system in the nursery
- Plant protection
- Plant Breeders' Rights and National Register of Varieties; Creating awareness of intellectual property issues amongst nurseries.
- Training on micro propagation for nurseries (for local production of grapes)
- Training on production of high quality, disease free, traceable planting material

**2. Support through the Association:** The Association stands out as a bridge between FAO and the nurseries, where nursery needs and challenges are well defined by the Association and communicated to FAO. Needs are mostly related to the knowledge of international practices as well as the details that should be considered while coping with the certification requirements.

Through FAO experts association is establishing contacts with international nurseries/breeders, in order to get access to the basic planning materials. New varieties, including protected ones, are of the primary interest for the association and its member nurseries. It should be noted, that the nurseries are expressing readiness to pay royalties related to the propagation of protected basic planting materials.

Association is actively involved in the establishment of a demo plot with one of the member nursery, with the profile of grape vine. The demo plot includes construction of a budget greenhouse where the green saplings would be located. This could serve as a good example for other nurseries that cannot cope with the isolation requirements that are to be introduced, with the certification system. Terms of references for the greenhouse has been drafted and the process has moved to the procurement.

The Association continues its work on identifying individual needs of the nurseries and generalizes the topics that are to be discussed with Georgian authorities. On the other hand, individual needs are communicated to the donor organization in search of technical support.

**3. Individual advice:** Based on the survey and an assessment study of nursery enterprises in Georgia conducted by FAO, a need to support the producers to accommodate to the new regulations and technical requirements was identified.

Taking advantages of the network of international experts, the project is providing where possible, individual advice to nurseries.

One example is the technical support provided to LTD Georgian Berry, the only nursery at the Association run by women and thus, one of our priorities in terms of support, in line with the project gender strategy. Three directions are been developed in the scope of the support, including capacity development through consultancy with FAO experts. Process has started and first online meeting was held. In the meeting, aspects of berry nursery operations under greenhouse conditions have been introduced and discussed.



Another example is a nursery facing issues related to the isolation requirements, which also receives technical support from experts regarding the possibility of installing a screenhouse and moving all the operations into it. The annual production is being evaluated to calculate the capacity the screenhouse should have to meet the requirements. Additionally, the nursery is supported in negotiations with international producers for getting access to the basic planting materials.

### **Facilitate the availability of basic services and quality/clean material.**

The multiplication of varieties for commercial purposes requires the existence of a live collection of plants of these varieties that are preserved under controlled conditions. This live collection of plants ensures the genetical purity of the varieties that are preserved for commercial or conservation purposes, as well as ensures that these plants are free from all pests. These “mother

plants” should serve as the starting material for a propagation scheme that will allow to multiply plants that will be genetically identical to the ones preserved.

They are preserved in gene banks or live collections, normally under the maintenance of state institutions. For commercial purposes, private nurseries can have access to the plant material from these collections of basic material, under certain conditions.

In the case of Georgia, this repository of propagating material (pre-basic and basic materials) is mainly kept in Jighaura, a research station under the SRCA of MEPA. The project has done an analysis of the collection based in Jighaura and has identified several bottlenecks that impede the correct conservation of the stored materials.

The main constraint is the absence of infrastructure to ensure the isolation of these materials, so that they will not get infected by viruses or other diseases or pests. For this purpose, the project has installed two screen houses of 400 m<sup>2</sup> each, where over 80 varieties of fruit plant and grapevine pest-free materials can be stored. In parallel, the project has produced, together with SRCA, the list of species and varieties of fruit and grapevines to be put in the screen houses, with a focus on non-patented varieties of commercial importance in Georgia, but also including local varieties of grapevine.

Since it is very important to maintain and propagate endemic varieties of grapevine in Georgia, the project has sent samples of 30 local varieties of grapevine to a specialised laboratory in Italy to be tested for viruses. Unfortunately, the plants did not found virus-free, so they could not be introduced in the screen houses and new ones had to be bought by the project. Rootstocks for grapevine and pome fruits (basic material) were ordered from the Netherlands and Italy and have been placed, grafted with virus-free local varieties and will be later propagated and handed over to private sector.

Additionally, a review of the status of the analytical laboratory facilities and the development of a supporting plan based on identified needs is being prepared to improve analytical services, key for the nurseries’ operations.



## Indicator 2.8. Creation of a National Seed and Seedling Association

**Selection of members:** A baseline survey for nurseries and support institutions that was carried out in 2019 with the participation of 81 nurseries. The objective of the survey was to assess the current conditions under which the nurseries operate and the main challenges in the nursery sector. The baseline survey report showed that many nurseries do not have the capacities or the interest to invest in upgrading their propagation practices to more advanced standards. It became therefore important to define a subset of nurseries that are ready to participate in the project and have full commitment to improve their standards of production. The project developed selection criteria, and out of the initial 81 nurseries, selected 31 that seemed to be the most promising. These 31 pre-selected nurseries were visited in order to identify business-oriented nurseries having potential of coping with the upcoming requirements related to the introduction of the qualification system. 20 nurseries were shortlisted for the first round of support activities by the project, having different profile of operations and located throughout Georgia out of which 3 were located in Kakheti, 9 in Shida Kartli, 1 in Imereti, 3 in Samegrelo, 3 in Mtskheta-Mtianeti and 1 in Samtkhe Javakheti.



Food and Agriculture Organization  
of the United Nations



The European Union  
for Georgia  
EUBusiness

Several working meetings with the representatives of the pre-selected nurseries have been organized where FAO presented the project, upcoming changes related to the establishment of National Seedling Certification system and the activities that will be implemented under the project in order to support the private sector and the importance of having sectoral association



that would unite the representatives of the sector and support their further development. In some cases consultation on the individual level required several meetings, both virtual and physical. The two main ideas behind which nurseries expressed readiness to unite were intra-collaboration in the sector and preparation for the certification process, where sharing experience and knowledge are the core of intra-collaboration. The upcoming certification system was also discussed and the necessity of having an organization where the needs of private sector would be consolidated and further communicated with the all the parties related to the sector, was well understood.



**The establishment of the Association:** In the process of the establishment of the association, FAO has given importance to keeping the process natural and to have the association established from bottom-up, by the representatives of the sector themselves. Ten nurseries expressed readiness to found such an organization, while the rest were ready to become a member, if the organization existed. Those ten nurseries were determined as the founders of the association.

In parallel with the communication, active development of primary statute for the association was discussed. The statute described the structure of the organization as well as its governing bodies and hierarchy. The primary version of the statute was shared with the founders of the association for their review. After slight changes the final version of the statute was

agreed, according to which the Association has the following structure: three level of hierarchy where the members of the Association represent the highest level. Members are eligible for choosing the Board of Directors for one year, where the number of the directors is not limited. Strategy and direction of the Association is elaborated by the Board. The Board is also eligible to appoint the Secretary General, who is the representative of the Association in charge of executing the strategy. The Secretary General is appointed for three years. The Association has been formally registered as “Georgian Seeds and Saplings Association” (GEOSSA).

Online meeting of the founders took place in parallel with the registration of the Association. All founders expressed willingness to be involved in the definition of the Association’s strategy. Consequently, each of them nominated themselves as a member of the Board of Directors. All of the candidates were elected. The meeting proceeded with the election of the Chairperson and the Secretary General of the Association. For the effectiveness in communication, it was decided to create a Viber group for the Board of Directors and Viber community for all members of the Association.

After the finalization of the formalities, the Board moved on to the working session, discussing main challenges of the nurseries and the sector. Due to the diversity of nursery profiles, it was decided to organize them in groups in accordance to their profile to facilitate discussions on



topics of interest for particular profiles. Once the discussion of the small groups is concluded, the main conclusions would be shared and discussed with the extended group. Strategy for each profile would be formulated separately in the small groups and integrated as a part of the general strategy of the Association. Groups for the following profiles have been established: berries, stone and pome fruit, nuts and grapevine. Working sessions in the small groups showed the following are among the common challenges for the nurseries:

- access to new varieties (including protected ones),
- access to mother blocks,
- necessity of having virus free and true to type varieties (especially for indigenous wine grape varieties),
- access to international experience and knowledge,
- need of technical support related to the transformation nurseries to be adapted to the new certification system.

### **Formal presentation of the newly established Association**

Once the Association was registered, statutes drafted and main objectives agreed among members, a launching event was organized. Because of the pandemic related to COVID-19, the launching event took place online, using the Zoom platform. All the parties related to the sector were present including the Ministry of Environmental Protection and Agriculture of Georgia, Scientific Research Center of Agriculture, National Food Agency, State Laboratory of Agriculture, sectoral associations, universities, donor organizations as well as the producers of seeds and seedlings. The success story of seeds certification as well as the importance of certification of the seedlings have been highlighted in the welcoming speeches of Government of Georgia, its agencies as well as the donor organizations. The event proceeded with the presentation of the Association and its objectives, that is to encourage inter-collaboration in the sector, contribute to solving existing problems of the members and advocate for their needs to be encountered at the government level, to get better opportunity to implement necessary standards for certification and to implement various initiatives together that will benefit and develop the sector.

### **Association membership expansion**

The appointed Secretary General of the Association proceeded with the expansion of the association's membership network. The rest of the nurseries from the diagnostic study have been contacted. Three more nurseries expressed willingness of joining the Association. The member identification work continued and new nurseries were contacted and visited. The meetings have brought outcomes and five more nurseries are considering to join the Association.

In the beginning, the nursery sector was involved in the process the most, but after several meetings with the main seeds producers Noblex and Lomtagora, their interest toward the Association has increased, together with the Union of Georgian Wheat producers.

At this stage, no strategy have been formed yet in the direction of seeds producers, however, the Association has taken actions towards international networking and has requested membership at



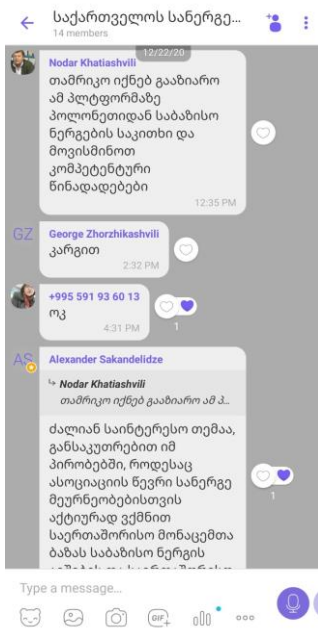
International Seed Federation (ISF). The primary communication with ISF has been successfully established and now the Association is in the process of becoming a member.

**Indicator 2.9. Number of nurseries certified and seed producers selling certified cereal seed**

This indicator is not directly linked to the activities of 2020, but to the implementation of the certification system, which is expected to be in place by next year.

However, to achieve the mentioned indicator, FAO undertook the following actions:

1. Establishment of the Certification System (to be implemented in 2021)
2. Establishment of the Seed and Saplings Association
3. Technical support to individual nurseries
4. Technical support to certification bodies
5. Support to the maintenance of the National Repository of fruit trees and grapevines.



**Indicator 2.10. The creation of a multi-stakeholder platform for seeds and seedlings**

Public stakeholders are key in the seeds and saplings sector and are present at many different levels. In the process of certification system alone, public stakeholders are linked to the regulatory framework, take part in the process of quality and phytosanitary control and certification and have a role in preserving the pre-basic and basic genetic materials in seed banks and live collections.

All along the process of the creation of the Association and the establishment of the certification system, communication and coordination with governmental agencies related to the sector have been a constant element. The easy access of the private sector to the public sector facilitates the flow of information and dialogue needed to reach fruitful commitments of actors active in the sector. In this regard, the creation of a multi-stakeholder platform was considered an

excellent tool to allow for this sectorial discussion to take place.

After a consultation, the Association, as the main representation of the private sector, proposed an online platform as the preferred means of communication with the main public sector stakeholders. After getting confirmation from all relevant authorities, a Viber group was created with a wide range of members including the Scientific Research Center of Agriculture, the National Food Agency, the Rural Development Agency, the State Laboratory of Agriculture, FAO and the Georgian Seeds and Saplings Association.

The platform is already active, and several issues related to the sector have already been discussed through it, facilitating interaction between actors, access to information and dialogue.

**Output 4. Migration is a mainstream component of SME development support. IOM:**



### **Indicator 4.1 Diaspora mapping conducted, interests, and priorities for investment identified and presented to the partner agencies for further consideration**

IOM continued building the diaspora profiles inventory, by filtering the data files and establishing individual profiles of 2,168 diaspora professionals (49% women). In total, 21,322 data files were reviewed. IOM finalized filtering of all the datasets from the PUBMED/PMC (scientific database with a focus on Life Sciences), ORCID (database of scientists and scholars), GB COMPANIES HOUSE (database of Beneficial Owners in the UK) and DOAJ (online directory with access to professional academic journals and authors). Around 20% of the data files from the ZoomInfo - business-to-business commercial database was also cleaned. The work in this direction is continuing until the very last datafile is reviewed and professional profile developed.

Over 1000 persons, from the diaspora inventory, have been contacted in two and more outreach rounds. By December 20, out of the outreached, 287 persons responded. Four persons declined and 283 expressed their interest in cooperation. An online bilingual (Geo-Eng) survey form was shared with all those contacted for completion. By the end of the reporting period 215 questionnaires were received (47% filled by women) and analyzed. The majority of the respondents indicated their interest in doing business in Georgia, provided there is the support from the state through different possible ways, e.g. supporting diaspora partnerships with the local enterprises or physical persons; engaging in the start-ups in Georgia, while still living abroad (some forms of enabling such a cooperation should be thought through the project); or establishing and leading business in Georgia. Some of the respondents displayed interest in short-term online and/or in-person assignments with the Georgian organizations and companies.

This highly participatory and consultative approach maintained the diaspora engaged and interested in the forum preparation process, thus ensuring a sense of ownership.

At this point IOM did not present officially the findings of the survey to the larger audience, but reviewed them with the partners, co-organizers of the diaspora forum at the Diaspora Relations Department, MFA, President's Administration, Secretariat of the State Commission on Migration Issues (SCMI). The findings were integrated in the event overall planning process.

The Diaspora inventory is a backbone of all the diaspora related activities envisaged by the project. The registered personal profiles are gradually activated through extensive outreaches to diaspora to ensure the reliability of the data on diaspora professionals and businesspersons as the registered information must be efficiently used for the project purposes, leading to practical testing of business-to-business models or diaspora assignments to the CMOs/member businesses.

### **Indicator 4.2 No of trained staff of central and/or local authorities in mainstreaming migration into local development**

The meetings were conducted in Kakheti with the regional and local authorities in January 2020, to discuss the planned diaspora forum and raise awareness on the diaspora potential for local



development. Later, in February (4-6 February 2020) the targeted sessions were conducted with the representatives of the municipalities and administrative-territorial units in the villages and communities, at all the 8 municipalities in Kakheti. 96 persons (28% women) increased their awareness regarding migrants' manifold potential in local development due to the transnational networks they maintain, through the richness of their experiences and knowledge, as well as through the financial resources they may possess or can mobilize. In the preparation of the diaspora economic forum the local government in Kakheti was advised on the importance of the availability of the information materials on the local investment related opportunities at the municipal and most importantly at each the village level be that tourism potential or natural resources or any other resources for sharing this information during and after the diaspora economic forum for attracting diaspora attention and possibly encouraging their investments in this local opportunities. The information on the available land resources for investments, collected from the Imereti municipalities within the project frames and uploaded at the diaspora web portal <http://gda.ge/pages/sainvestitsio-shesadzleblobebi>, was shared with the workshop participants as a good example of such engagement at the local government level.

The series of meetings with the stakeholder agencies in the government, donor and international community and private sector, conducted by IOM in August 2020, and provided presentation materials on their programmes and services for the diaspora forum were uploaded in the portal and enriched the information on the MSME support programmes and services at the business and investment section of the **diaspora web portal**.

The content of the platform has been regularly updated by the portal administrator seconded by IOM to the Diaspora Relations Department, MFA. Continued technical upgrade of the portal is planned also for the next reporting period, jointly with the MFA.

The platform is part of the MFA web space. The Minister of Foreign Affairs is very supportive to promote the platform among the Georgian diaspora. In January 2020, after the Ambassadorial meeting in Tbilisi and as the Minister's direct assignment, Georgian ambassadors started active promotion of diaspora portal among the Georgian diaspora associations and individuals. As a direct result of this active promotional policy, the visitors' statistics of the web portal almost doubled from 800 in December 2019 to 1400 and 1700 in January - February 2020, respectively. This process was seriously affected by the Covid19. Statistics fell again to the 2019 margins. The



improvements started from May - 1400 visitors and reaching 2700 visitors per month in December 2020.

The increase of visitors in the last few months of the reporting year can also be attributed to the accelerated outreach with the diaspora, established regular communication channels with them, informing about the availability of the dedicated platform for diaspora; accordingly, an annual number of the visitors of this platform increased almost 3 times in comparison with the 2019, reaching over 20,000 visitors in 2020. It is expected that the diaspora forum and uploaded information at the portal, as well as Diaspora follow-up activities that already have and will contribute to more visits and utilization of the diaspora portal services, may possible double this number in 2021.

According to the statistics, 4 leading areas of diaspora's major interest are: dual citizenship, diaspora associations, Georgian language courses and business / investing opportunities in Georgia.

#### **Indicator 4.3 on track: Networking events and/or trade fairs in Georgia and EU**

IOM started preparations for the diaspora economic forum, also encouraged by the responses received from diaspora with the expressed interest on doing business or (short) work assignments in the local businesses in Georgia. The communication with diaspora continued, both with already contacted as with new persons from the inventory. The short outline of the concept of the event providing an overview of the planned sessions, was disseminated among all the outreached diaspora individuals to gauge their interest to the planned virtual event and keep them engaged. Later this concept document was used as a basis for constructing the forum agenda.

An online meeting was arranged on 17 October with the 27 diaspora professionals, And soon after the postponing the forum to a later date. The participants expressed strong support to the forum idea as it would provide a comprehensive display of the SME development landscape, business support programmes in Georgia. The participants also expressed strong interest in networking with other fellow Georgian compatriots, residing in Europe and beyond. IOM will plan such a networking event as one of the follow-up actions of the diaspora economic forum that is planned for 27 February 2021. Such events should promote networking between the professional diaspora, ultimately leading to formation of professional groups, business associations, or any other reasonable forms of structured cooperation among the Georgian diaspora.

For the event planning purposes, on 18 August 2020, IOM held three consecutive discussion sessions with various project stakeholder agencies in the Georgian government, partner UN agencies and other international organizations, and banking and micro-finance institutions. The purpose of these workshops was to a) inform the participants on the already conducted high-profile diaspora mapping through international web portals, and existence of the regularly updated inventory with professional profiles of individual diaspora; b) acquaint with the intellectual and business capacities the profiled diaspora possesses and c) explain to the



participants that Georgians living abroad could successfully benefit from the state/non-state MSME support programmes for viable business development.

Therefore, timely, and targeted communication between the representatives of Georgian diaspora and the government, private sector and other organizations in Georgia was crucially important for providing comprehensive information on these programmes and service supporting the local business development, and from which the Georgian diaspora could also successfully benefit.

The participant agencies agreed to develop presentation materials for the Forum, on their respective programmes, with the details on geography, start and end dates, accessibility, eligibility criteria and any other useful information.

The bilingual presentation materials for the event were developed by all the participant agencies. Individual rehearsals were conducted online with 21 participant agencies, to review the presentations through the diaspora lenses and adjust accordingly. All these presentations have been uploaded at the diaspora web portal and can be viewed [here](#).

Diaspora Forum planned for October 2020, was postponed due to the parliamentary elections in the country and is now planned for February 2021.

#### **Indicator 4.4 on track: Number of qualified diaspora assignments for CMOs and/or companies capacity building purposes**

For benefitting from the professional experience and capacities of the diaspora, IOM selected 84 individual profiles of the diaspora representatives and shared with the Project partners - UNDP and FAO to match the identified capacity building gaps and needs of the cluster management organizations and/or member businesses. After the review, UNDP selected 40 profiles. IOM has contacted the selected professionals and based on their consent provided UNDP with the CVs shared by the pre-selected diaspora persons. After some discussions with FAO, one virtual assignment of diaspora professional to the Georgian Seeds and Seedlings Association - GEOSSA, established by FAO, will be soon materialized. The assigned diaspora persons will develop a website along with the online database for national seeds and planting materials, as well as a general registry of the nurseries and seeds producers operating in Georgia.

### **Delays in implementation, challenges, lessons learned & best practices**

#### **Delays:**

Due to COVID-19 pandemic and restrictions over international and local travels, some significant delays for project occurred, including:

1. UNIDO initially planned to start all eight cluster diagnostic studies in March 2020, however, country-wide lockdown asked to re-think planning activities for the studies. UNIDO managed to start studies only in June 2020 when majority of restriction were lifted.
2. As the second tranche was delayed, UNIDO was unable to start with all eight cluster diagnostic studies in June 2020, thus, in consultations with MEPA and MoESD, it was agreed to start with only three priority clusters (delays with transferring the second tranche until fall 2020).



3. In the fourth quarter of 2020, UNIDO aimed to organize awareness seminars targeting institutional stakeholders and identified potential cluster members to sensitize them on the available policies and support schemes (Activity 1.3.2). However, as such events ask for more face-to-face meetings and physical presence, UNIDO opted to organize awareness raising seminars once results of all eight cluster diagnostic studies are available and restrictions are fully lifted.
4. Development of EPR-related legislation is ongoing in Georgia. UNDP has undertaken a number of actions, conducted studies and held webinars and workshops. Major interventions will be commenced once regulations are enacted during the implementation phase. The government has already approved technical regulations for four out of six EPR-specific waste streams (waste from electrical and electronic equipment, waste oils, waste tires, waste batteries and accumulators). There are national targets established to be achieved gradually for the collection, recycling and recovery of the waste. Two more Regulations (for packaging waste and end-of-life vehicles) are currently under review by governmental institutions. According to the Ministry of Environmental Protection and Agriculture (the author and initiator of the EPR legislation in Georgia), enforcement of the new regulation related to the packaging sector will be postponed. **Based on the latest information, the deadline for registration in the EPR registry will be 1 July 2022; recycling targets will be calculated from 2023.**
5. Indicator 4.1. Planned survey of Georgian Diaspora in the selected 4 countries of Europe, did not materialize. In the first year there was no sufficient information on the professional diaspora in the EU countries, as the development of diaspora's professional profiles was still in its initial stage; then Covid19 induced travel restrictions could not allow for organizing the surveys in the selected EU countries as was initially planned. Instead, IOM used the online communication opportunities to contact diaspora representatives Europe-wide, without any geographic restrictions and in much higher numbers than it would be feasible during the physical outreaches. The analyzed results of the online survey provided for better planning of the first diaspora economic forum, to be conducted in February 2021. Now, the second survey will be conducted with the forum participants. This time the questionnaire will try to grasp concrete intentions, and propositions for business activities by the diaspora representatives in Georgia. The analysis of the second and first questionnaires should ensure the development of the diaspora forum follow-up action plan.
6. Indicator 4.2 The started work with the regional and local authorities on mainstreaming migration into local development was continued also in the reporting period, but to a limited level in February 2020 but could not continue due to the Covid restrictions, specially hitting hard the Imereti region.
7. Indicator 4.3 Diaspora forum planned for 3 October 2020 was postponed due to the elections (30 October 2020 ) and is planned now for 27 February 2021.

#### Lessons learned:

- **Trust building and expectations:** Business executives are getting knowledge, experience and trust of the cluster initiative, the first reluctance to be participate, open





and cooperative (among competitors), gradually, through workshops, sharing experience, they get accustomed to collaboration among organizations in a cluster environment, meaning the art of interacting with other organizations in a wider dimension than just the client-supplier relationship, and most importantly, they started trusting each other. UNDP encouraged women's involvement in cluster development activities, which played an important role in building trust among member companies.

- **Common interests of cluster companies:** Common interests have been identified, delineating a group of organizations that share common fields of interest that allow them to interact and be willing to initiate relationships. It was understood that realization of the initiatives in the medium- and short term would improve the comparative advantages of the whole sector, together and individually.
- **Institutional development:** The Cluster Initiative has been transferred into a formal organization, setting up CMO – PMAG Packaging Cluster with a corporate structure and representations in the Imereti and Kakheti regions. A statute and standard operating procedures have been developed. Further measures to develop the capacities of managers have been undertaken (including sharing international practices and building cooperation with other local and international clusters).
- **Strategy development:** Analysing the individual needs of each organization within a cluster environment was an important first step. Building on this foundation, UNDP started translating these needs into a draft strategy, common initiatives and issues to be addressed. UNDP will address issues by engaging organizations in activities and motivating their direct involvement in actions.

### Challenges:

1. Building a cluster is a continuous process. It is important to continue nourishing trust-building and spreading it to a wider spectrum of companies in Tbilisi and other regions. This will facilitate attracting new members from the packaging ecosystem into the cluster, will achieve inclusivity and will help realize the initiative's full potential.
2. Institutional development and strategy execution, in parallel with continued capacity building of the cluster and its members, and most importantly, realization of already undertaken and planned activities (women led initiatives will be encouraged) for the benefit of the packaging sector and individual companies. The latter includes implementing activities related to Output 3 'Packaging and seeds/seedlings clusters enhanced through strategic investment', launched in 2020 with the widest possible coverage of the companies (which are potential beneficiaries of the support).
3. Support PMAG to execute its strategy to address challenges existing in the industry, specifically:
  - a. Modernizing the machine park to guarantee quality, repeatability and price competitiveness of products offered on the market.
  - b. Developing competencies among employees, at management and operational functions levels (e.g. accounting, sales, human resources) and at the production level (operators, maintenance personnel, production planning and optimization).



- c. Strengthening cooperation in material buyers' groups will enable them to buy materials at a lower price on the international market.
  - d. Strengthening cooperation in sales platforms will create more complex services and product portfolios and will flexibly meet the requirements of niche segments.
  - e. Reaching conformity with international standards and certification requirements (food safety, EPR).
  - f. Coping with environmental issues concerning water and air pollution, health and safety issues, waste recuperation and recycling in order to reach conformity with international standards.
  - g. Improving insight into new technologies and developing packaging solutions, including active packaging (gas scavengers, corrosion control, moisture control, antimicrobial), intelligent packaging (sensors, codes, tags, tracking devices, time-temperature indicators), edible packaging, soluble packaging, antibacterial packaging, self-cooling and self-heating packaging, multisensory packaging and non-stick packaging.
  - h. Strengthening cooperation with downstream industries in Georgia on the development of tailor-made solutions for the international market in the food and chemical sectors.
  - i. Increasing the presence in the international markets, especially in the EU and the Black Sea area, Caspian Sea area and Gulf area.
4. UNIDO: Due to COVID-19 pandemic and restrictions over international and local travels, missions of the UNIDO project team were cancelled. This did not affect the quality of the cluster diagnostic studies, however, for the cluster level interventions, it is necessary to ensure face-to-face meetings to agree and implement concrete joint actions. Funds saved due to international travel cancellations, field visits and organization of physical meetings will be channelled towards direct support to the selected clusters as well as for conducting additional cluster diagnostic study for Greenhouse Cluster in the Imereti regions as per request from MEPA.

## Qualitative assessment

**UNIDO:** The activities during the reporting period were conducted in close coordination and consultation with:

- Participating UN organizations through regular meetings and communication to ensure synergies and information sharing, which contributed towards establishment of common understating of the cluster concept;
- FAO by providing general advice regarding structure and vision of the potential cluster and the structure of the diagnostic studies;
- Other implementing agencies, which are contributing to the EUs goal to support Greater Business Sophistication, through regular meetings and communication, which strengthened synergies between agencies and helped to avoid duplications.



**UNDP:** The activities of UNDP were planned and implemented with relevant government stakeholders:

- The project continued partnerships with local and regional authorities of the Imereti and Kakheti regions; MEPA and its Agriculture and Rural Development Agency; and MoESD and its agency responsible for entrepreneurship support, Enterprise Georgia.
- **International partnerships have been established and enhanced**
  - Membership in **World Packaging Organization** and gaining member status will give PMAG easier access to world packaging technologies.
  - Placing the PMAG Packaging Cluster on the **European Cluster Excellence Initiative** Platform will make it easier to build cooperation with European counterparts. Special actions have been taken to gain quality label conforming quality of cluster management practices, planned to be attained during the next reporting period.
  - Establishing cooperation with the **Ukrainian Packaging Cluster, the Regional Cluster of Polygraphic and Packaging Industry**, will facilitate development of cooperation with Ukrainian and Georgian printing and packaging companies.
  - Cooperation with **Omnipack (Hungary)** and **Natureef (Poland)** has been enhanced. Because Eastern European countries, though more advanced, are still relatively close to Georgia in terms of economic development, particular emphasis has been put on cooperating with the Polish and Hungarian clusters. Eventually, the PMAG Packaging Cluster will gain basic functionality that can be enhanced through cooperation with more advanced Western European countries, including the Spanish and Swedish CMOs.
- **Local Partnership with Universities:** An internship programme has been launched with four leading educational institutions. The internship programme appears to be an excellent opportunity for motivated young people to move forward and to develop and promote their employment. It also enabled member companies to find the staff they want, to train/retrain them, and, if they wish, to continue working with them. Within the internship programme, **10 students were interned within 2020:** one student with the project, three students with PMAG, and six students with member companies (out of which two students were having an internship in Tbilisi-based companies, while the other four students had internships in other regions of Georgia). The project will continue to support to the packing cluster to implement the internship programme.

**FAO:** All activities during the reporting period were implemented with close and productive collaboration with:

- The Ministry of Environmental Protection and Agriculture of Georgia, including senior management – line deputy Ministers
- Scientific Research Centre of Agriculture and National Food Agency while working on the establishment of National Seedling certification System



- RDA – Agriculture and Rural development Agency of the Ministry of Environmental protection and Agriculture in order to harmonize state program “Plant the Future’s requirements with the work under National seedling certification system;
- UNIDO - by developing a questionnaire for the comprehensive work on Baseline study of Seedling sector;
- ENPARD implementing partners, regular information sharing in order to create synergies and complement to the EU’s overall objective for the enhancement of private sector s’ competitiveness in GEORGIA

Establishing partnerships and fruitful linkages with the representatives of private sector, in particular with Nursery enterprises, farmers and etc.

**IOM:** The most important issue for highlighting is the established interactive communication with the Georgian diaspora.

The cooperation of the government agencies - Enterprise Georgia, GITA, RDA, Agency of Mines, State Property Agency, etc. was extraordinary in this planning stage of the forum. IOM met with the Minister of Economy and Sustainable development in the forum preparation period, who assured IOM on the Ministry’s full support to the forum preparation and then in the follow-up work.

The coordination and cooperation with the partner UN agencies and the government partners at the Diaspora Relations Department, MFA, Administration of the President of Georgia and Secretariat of the State Commission on Migration Issues, in this joint project deserves the highest appraisal.

## ii) Indicator Based Performance Assessment:

	<u>Achieved</u> Indicator Targets	Reasons for Variance with Planned Target (if any)	Source of Verification
<p><b>Outcome 1</b> Enhance entrepreneurship and business sophistication by strengthening the capacities of government and local entities to develop and operate clusters and supporting companies directly with strategic investments while also demonstrating the effectiveness of these strategies to businesses</p> <p><b>Indicators:</b> 1. # of identified potential clusters <b>Baseline: 0</b> <b>Planned Target: 10</b> 2. Growth rate of selected clusters' members' turnover <b>Baseline:</b> 2018 output data <b>Planned Target:</b> 20% growth 3. Balance of trade in selected sectors <b>Baseline:</b> 2018 sector balance of trade <b>Planned Target:</b> 10% improvement (higher exports or lower imports)</p>	<p>1. 57 emerging and potential clusters</p> <p>2. Turnover of the packaging cluster members for 2020 increased by 21.9% compared to 2018</p> <p>3. For 2020 balance of Trade for packaging (plastic and paper) sector improved by 28.3% compared to 2018</p>		<p>Report “Mapping Emerging and Potential Manufacturing and Agri-Business Clusters in Georgia”, February 2020</p> <p>Project Report</p> <p>UNDP: “Packaging Sector Companies Study Report” (includes survey of companies and available public data sources, <a href="https://reportal.ge/">https://reportal.ge/</a>) GeoStat</p>
<p><b>Indicator 1.1</b> Cluster mapping undertaken based on prioritization criteria set with local counterparts <b>Baseline: 0</b> <b>Planned Target: 1</b> (Achieved 100%)</p>	<p>UNIDO. 1.1. First of its kind comprehensive mapping of 57 manufacturing and agri-business clusters in Georgia</p>		<p>Report “Mapping Emerging and Potential Manufacturing and Agri-Business Clusters in Georgia”, February 2020 Press clips Conference reports</p>
<p><b>Indicator 1.2</b> No of emerging and/or potential clusters detailed diagnostic studies by the programme <b>Baseline: 0</b> <b>Planned Target: 8</b></p>	<p>UNIDO. 1.2. First of its kind 3 cluster diagnostic studies conducted: Marine fishing, Pharmaceutical production with a focus on bacteriophages and herbal products, and Processing fruits and vegetables with a focus on hazelnuts</p>	N/A	<p>Cluster Diagnostic Studies</p> <p>Project reports</p>

<p><b>Indicator 1.3</b> No of institutions and people trained on cluster mapping and diagnostic (% of women) <b>Baseline:</b> N/A <b>Planned Target:</b> 5 institutions; 30 people (male/female – TBI) (Achieved 50%)</p>	<p>UNIDO. 1.3. 30 persons, including 13 women (43%), from 10 organizations were trained on clusters with a focus on diagnostics and action planning for cluster sustainability (<i>MoESD, Enterprise Georgia, MEPA, RDA, Scientific-Research Center of Agriculture, UNDP, FAO, Packaging Association, PMCG Research, TBSC Consulting</i>)</p>	<p>N/A</p>	<p>Report “Mapping Emerging and Potential Manufacturing and Agri-Business Clusters in Georgia”, February 2020  Training Report</p>
<p><b>Indicator 1.4</b> # of cluster activities realized in pilot clusters identified through the diagnostic <b>Baseline:</b> 0 <b>Planned Target:</b> 2</p>	<p>UNIDO. 1.4. This indicator will be achieved in 2021/2022</p>	<p>N/A</p>	<p>Project reports  Press clips</p>
<p><b>Output 2 Development and functioning of the clustering approach in the packaging and seeds/seedling (UNDP Georgia and FAO)</b>  <b>Indicator 2.1</b> Number of CMOs that are operating in the packaging and seed and seedling sectors <b>Baseline:</b>0 <b>Planned Target :2</b> (in total for UNDP and FAO)</p>	<p>UNDP: 2.1. 1 in packaging sector (with 3 representations in the Imereti, Kakheti and Tbilisi Regions), FAO: 2.1. 1 CMO for seeds and saplings sector has been created and is actively operating.</p>	<p>N/A</p>	<p>UNDP: Project Report and Cluster member web page: <a href="http://pmag.ge/en/13-memberscat">http://pmag.ge/en/13-memberscat</a></p>
<p><b>Indicator 2.2</b> No of companies who are part of the CMOs in the packaging and seed and seedlings sector <b>Baseline:</b>0 <b>Planned Target: At least 50</b> (in total for UNDP and FAO) <b>(at least 10 % women-led)</b></p>	<p>UNDP: 2.2. The PMAG Packaging Cluster has 37 members (18 full, 19 associate). In addition, it has 5 honorary members. 24.3% (9 out of 37) businesses are women-led. FAO: 2.2. Number of nurseries members of the Association (CMO): 11 confirmed plus 5 that submitted application to be approved by the Board; number of companies who have shown preliminary interest and will potentially be part of the seed and saplings sector cluster around the CMO: 14.</p>	<p>N/A</p>	<p>UNDP: Project Report and Cluster member web page: <a href="http://pmag.ge/en/13-memberscat">http://pmag.ge/en/13-memberscat</a></p>
<p><b>Indicator 2.3</b> No of inter-firm collaborative initiatives/projects undertaken between the</p>	<p>UNDP: 2.3. 5 Activities have been commenced; results started arriving from</p>	<p>FAO: 2.3 Number of inter-firm collaborative initiatives/projects undertaken between</p>	<p>UNDP Project Report</p>

<p>CMOs' members <b>Baseline:0</b> <b>Planned Target:</b> At least 10 – for reporting period - (in total for UNDP and FAO)</p>	<p>next reporting period (packaging sector)</p>	<p>CMOs' members: planned for Year 2021</p>	
<p><b>Indicator 2.4</b> % of self-financing of CMO in packaging <b>Baseline:0</b> <b>Planned Target: At least 30% (does not include donor funding)</b></p>	<p>UNDP: On track, partially achieved. 15% of self-financing annualized; combining all costs for 2020, 37% self-sufficiency adjusted just for operational costs; 37 member companies financing volume is GEL 74,400 annualized for 2020; annualized operational costs are approximately GEL 200,000.</p>	<p>UNDP: CMO gradually attracts new members; Indicator 2.4 is to be achieved in the next reporting period(s)</p>	<p>UNDP: Project Report</p>
<p><b>Indicator 2.5</b> CMO in packaging cluster facilitates EPR implementation in packaging <b>Baseline: No</b> <b>Planned Target: Yes</b></p>	<p>UNDP: On track, legal analysis and CMO tasks in implementing the EPR are identified, based on current draft law. UNDP closely follows processes to align its activities according to developments.</p>	<p>UNDP: EPR law approval and implementation has been delayed due to the COVID-19 pandemic; it is expected to be enacted by the end of 2021</p>	<p>UNDP: Project Report</p>
<p><b>Indicator 2.6</b> No of priority needs solved in CMOs <b>Baseline: No</b> <b>Planned Target: 20</b> (in total for UNDP and FAO)</p>	<p>UNDP 2.6. On track, 15 needs solved in 6 areas</p>	<p>FAO: Number of priority needs solved in CMO planned for Year 2021</p>	<p>UNDP Project Report</p>
<p><b>Indicator 2.7</b> Seedling Certification System approved and operational <b>Baseline: NO</b> <b>Planned Target: YES</b></p> <p><b>Indicator 2.8</b> Seed Association created Baseline: 0 Planned Target: 1</p> <p><b>Indicator 2.9</b> Number of nursery operators registered and selling certified nursery material Baseline: 0 Planned Target: 25 (at least 10% women –led)</p>	<p>FAO: 2.7 Seedling certification system designed and submitted to Government for approval. Operationalization expected for 2021</p>	<p>FAO: Planned for Year 2</p> <p>FAO: 2.9 Number of nursery operators registered and selling certified nursery material, Result expected for year 2022</p>	

<p><b>Indicator 2.10</b> The creation of multi-stakeholder platform for seeds and seedlings Baseline: 0 Planned Target: 1</p>	<p>FAO: Multi-stakeholder platform for seeds and saplings created and actively operational</p>		
<p><b>Output 3 Packaging and seeds/seedlings clusters enhanced through strategic investment (UNDP)</b></p> <p><b>Indicator 3.1</b> No of jobs supported/sustained by the EU (UNDP and FAO) <b>Baseline:0</b> <b>Planned Target: At least 30</b></p> <p><b>Indicator 3.2</b> No of companies expanded sales at least by 15% (UNDP and FAO) <b>Baseline:0</b> <b>Planned Target: At least 10</b></p> <p><b>Indicator 3.3</b> No of quality schemes adopted by economic operators with EU Support (UNDP and FAO) <b>Baseline:0</b> <b>Planned Target: At least 8</b></p>	<p>3.2 16 PMAG Packaging Cluster member companies have increased sales at least by 15%</p>	<p>UNDP: Indicators 3.1 and 3.3 to be achieved in the years 2021 and 2022</p> <p>FAO: Indicators, 3.1, 3.2 and 3.3. Result expected in year 2022</p>	<p>UNDP Packaging Sector Companies Study Report (includes survey of companies and available public data sources, <a href="https://reportal.ge/">https://reportal.ge/</a>)</p>
<p><b>Output 4 Migration is a mainstream component of SME development support (Resp. IOM)</b></p> <p><b>Indicator 4.1</b> Diaspora mapping conducted, interests, and priorities for investment identified and presented to the partner agencies for further consideration <b>Baseline: No</b> <b>Planned Target: Yes (60% reached)</b></p>	<p>Inventory with over 2000 diaspora business and professional profiles Over 200 diasporas made aware of packaging clusters and Seeds and Seedlings Association</p> <p>Diaspora mapping conducted through 5 large professional and business web portals. Data filtering and cleaning initiated. 2,168 individual profiles developed; 1000 outreached. To date 283 responded with expression of cooperation interested with the Georgian state, private sector. 215 out of indicated filled in the online survey form. Almost the majority 90% indicated in</p>		<p>Diaspora professional profiles inventory</p> <p>Diaspora Profiles Inventory; Results of the Diaspora survey.</p>



	the form that are interested in B2B contacts or work in the Georgian businesses.		
<b>4.2 No of trained staff of central and/or local authorities in mainstreaming migration into local development</b> <b>Baseline: 0</b> <b>Planned Target: 60 (at least 30% women)</b>	<p>2 Meetings with the regional authorities conducted; 4 awareness raising workshop on Mainstreaming Migration into local development conducted for the staff of of 88 Municipalities in Kakheti and 79 Admin-territorial representatives in the local villages/communities In total awareness of 96 persons (28% women) raised on nexus between migration and local development</p> <p>The presentation materials on Business support programmes and services uploaded on the diaspora portal.</p>		<p>Agenda of the meetings with the representatives of the Admin-territorial units of the Municipalities.</p> <p>Diaspora web portal, <a href="https://bit.ly/3b7MvJU">https://bit.ly/3b7MvJU</a> and <a href="https://bit.ly/2QUCnxe">https://bit.ly/2QUCnxe</a></p>
<b>4.3 Networking events and/or trade fairs in Georgia and EU</b> <b>Baseline: 0</b> <b>Planned Target: 3</b>	<p>3 group coordination meetings and 16 individual coordination meetings/rehearsals held with the agencies presenting at the diaspora forum for fine tuning their presentations to the diaspora interests. 1 informal meeting with 26 diaspora persons, to discuss the planned cooperation areas by the joint project</p>		<p>Diaspora Forum draft Agenda, Registered list of Georgians living abroad interested to attend the Forum.</p> <p>Prepared presentation materials, uploaded at the portal</p>
<b>4.4 No of qualified diaspora assignments for CMOs and/or companies' capacity building purposes</b> <b>Baseline: 0</b> <b>Planned Target: 6</b>	<p>1 assignment in preparation at the Georgian Seeds and Seedlings Association, FAO</p>	4.4 Planned in 2021, Preparations in process	<p>Assignment contract, assignment monitoring report</p>



### iii) A Specific Story

**UNIDO:** The clusters are an excellent tool for promotion of private sector based pro-poor growth, defined as a pattern of economic growth that creates opportunities for the poor, and generates the conditions for them to take advantage of those opportunities. First of its kind comprehensive mapping of 57 emerging and potential clusters and cluster diagnostic studies showed the Government an importance of proper design and planning in order to implement well-structured cluster support programmes. As a result of this, MEPA approached UNIDO to conduct 9<sup>th</sup> cluster diagnostic study for Greenhouse Cluster in the Imereti region, which was ranked 17<sup>th</sup> in the cluster mapping exercise. UNIDO plans to finalize additional study in April 2021.

**UNDP:** UNDP promoted socially responsible businesses during the pandemic by supporting the development of **adjustable and reusable face shields produced (from reprocessed plastic)** by CaucasPack, a Georgian company. The face shields were for donation to front-line health-care staff, local civil servants and packaging industry workers in Tbilisi and other regions. This was done within the framework of the UNDP Country Office Georgia Economic Development and Democratic Governance portfolio.

In response to the increasing demand for locally manufactured, high-quality protective equipment during the pandemic, UNDP, through the PMAG Packaging Cluster, facilitated and promoted the idea among cluster members to support local production in meeting the growing need for protective supplies. CaucasPack, a food packaging producer and member of the PMAG cluster, showed high social responsibility and succeeded in repurposing their production lines to manufacture high-quality face shields in response to the changing market demand during the crisis.

The idea for protective equipment, produced from recycled plastic bottles, was sourced from the German Fab Lab. **This initiative made saved the jobs of 99 people (66 men and 33 women) and significantly reduced the price of face shields.** Furthermore, UNDP Country Office Georgia, within the frameworks of different portfolio projects, joined the initiative to procure a batch of **40,000 shields for donation** to target beneficiaries.

### III. Other Assessments or Evaluations

Bellow is the list of various reports, assessment and evaluations, as well as reviews attached to this report.

UNIDO Cluster Development Training Georgia

UNIDO Cluster Diagnostic Study Hazelnut Processing

UNIDO Cluster Diagnostic Study Pharmaceutical Production

UNIDO Cluster Diagnostic Study Marine Fishing

UNDP Proposal Cluster Management Organization Development in the Packaging Sector in Georgia

UNDP Proposal CMO's Organization Structure

UNDP Proposal on The Business Plan for the PMAG Packaging

UNDP Proposal on the PMAG Packaging Cluster Strategy Implementation Improvement

UNDP Packaging Sector Study Report 2020

UNDP Study on Pandemic Impact Assessment on Packaging Supply Chain in Georgia

UNDP Presentation on Pandemic Impact Assessment on Packaging Supply Chain in Georgia

UNDP Report on Investment Needs



## UNDP Criteria for Support Measure in Packaging Sector Companies for Implementing Matching Grant Schemes

UNDP Grant Applicant Guide

UNDP Grant Application Form

UNDP Responsible Party Agreement with ABCO

UNDP Responsible Party Agreement with GOSM

UNDP Workshop on Cluster Management

UNDP Study on CMOs in Packaging Sector in EU and Associate States

UNDP Recommendation on Inter-Firm Cooperation Producer Responsibility Organization (PRO) Models for Packaging Sector

UNDP EPR in Packaging and Packaging Materials, How Not to Make Same Mistakes

UNDP Regulatory Review of Production, Import and Use of Plastic and Biodegradable Bags in Georgia

UNDP Report Road to Biodegradable Packaging in Georgia

UNDP Approximation on Packaging Sector with EU

IOM Diaspora Online Survey Results

IOM Diaspora Forum Concept Paper

IOM Coordination meetings - preparations for the Diaspora Forum

UNJP: Workplan YY 2 and 3

UNJP: Risk Analysis update 2020

For more information on visibility and communication please see attached annex:

UNJP 2020 Communication and Visibility Report

### **IV. Programmatic Revisions (if applicable) N/A**

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