FAIR LABOR ASSOCIATION

Improving Workers' Lives Worldwide

TASK AND LABOR RISK MAPPING: HYBRID CORN AND SUNFLOWER SEEDS IN ROMANIA

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I. INTRODUCTION

In 2011, the Fair Labor Association (FLA) launched a study of corn and sunflower production to develop a better understanding of the agriculture sector in Romania. The study was conducted in collaboration with a representative from the international NGO Human Resources without Borders, and an independent Romanian auditor named Mariana Petcu. The aim of this research was to understand the production processes of corn and sunflower seeds and to map the labor risks with regards to labor laws and FLA's Workplace Code of Conduct in Romania.

Labor standards risks were mapped at three levels in this study:

- Country (local conditions, labor laws, etc.)
- Supply chain management systems (code awareness, training, etc.)
- Farm (tasks, working conditions, etc.)

The first stage was desk-based research on the Romanian agriculture sector. The second stage consisted of a field visit conducted from September 26–30, 2011, to agricultural areas near the city of Iasi in northeastern Romania. Data was collected through interviews, documentation review and visual assessment. During the field visit, interviews were held with external stakeholders such as the labor inspector for the Iasi region; trade union leaders in a local textile company; officials of a village health center and of a local NGO in charge of programs for children and minorities; and the director of the Iasi agriculture high school to collect information specific to the region. As Syngenta is an affiliate of the FLA with production in Romania, information was also gathered from their local staff, third party seed organizers, growers and workers at four farms producing corn and sunflower seeds. Since the field visit took place towards the end of the harvest and a majority of workers had already left, only a limited number of stakeholders could be interviewed.

This report is a first effort to map the labor risks based on a limited sample of farms and stakeholders. Further visits may be required to observe seed production processes and associated risks during the peak-growing season to obtain a broader picture.

II. COUNTRY RISKS

AGRICULTURE IN ROMANIA[1]

Agriculture is an important sector in the Romanian economy, contributing 7-10 percent of its gross domestic product (GDP), depending on the year and climatic conditions. The Usable Agricultural Area (UAA) in Romania is 14.7 million hectares (ha), with almost 9.42 million ha of arable land, 3.3 million ha of pasture, 220,000 ha of vines and

Interviews with daily workers at a farm.

1 Source: www.agri-planet.com/

Corn harvesting on the farms.

vine nurseries, and 206,000 ha of orchards. There are currently about 4 million farms in Romania. Following the fall of the communist regime in 1989, the transitional government redistributed agricultural land held by the former cooperatives to small farmers. As a result, the Romanian agriculture sector is dominated by small farms (80 percent of farms are small, averaging 3.37 ha), operating on a non-commercial subsistence basis.

The large farms in Romania are formerly state-owned enterprises that have been privatized. In some cases, these farms can have up to tens of thousands of ha. These farms are mostly mechanized, efficient and run either as commercial companies or associations, producing mainly cereals and industrial crops. Large farms are concentrated in three administrative areas (judets) in the plains of the southeast of the country with easy access to water. Between these two extremes are medium-sized farms, consisting of 10-50 ha, which represent 6 percent of the UAA.[3]

Crop production uses 64 percent of the UAA and accounts for over 60 percent of the value of agricultural output. Production is concentrated on three crops, which take up almost 60 percent of arable land: corn (2,449,600 ha), wheat (2,110,300 ha), and sunflower (813,900 ha).

Annual yields and production volumes vary significantly due to climatic conditions. As an example, the table below shows production volumes for the main crops in 2007 (during a drought) and 2008.

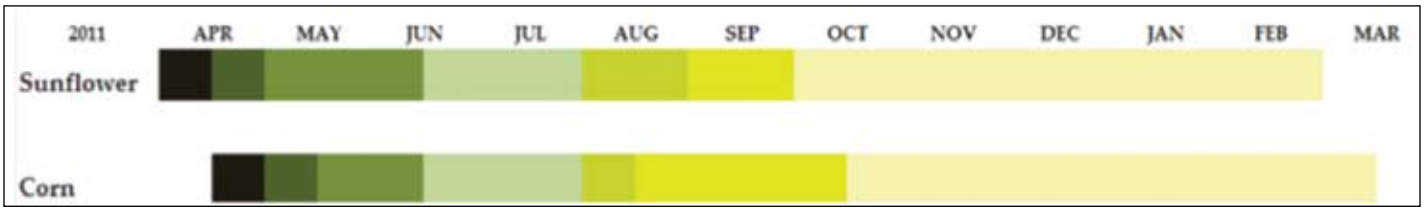
PRODUCTION VOLUMES FOR THE MAIN CROPS 2007, 2008[2]

YEAR	WHEAT	CORN	BARLEY	SUNFLOWER	COLZA
2007	3 million tons (mill T)	3.8 mill T	0.5 mill T	0.5 mill T	0.3 mill T
2008	7.2 mill T	7.8 mill T	1.2 mill T	1.16 mill T	0.6 mill T

2 Source: Ministry of Agriculture (Romania)

3 Source: PNDR (National Rural Development Plan)

2011 CROP CALENDAR



Key

	Nursery/Seed Sowing
	Transplanting/Planting
	Vegetative Growth Stage
	Flowering/Pollination
	Ear Maturity Stage
	Harvesting/Sorting/Drying (peak stage)
	Seeds Processing

CROP CALENDAR

One crop each of corn and sunflower are grown per year. The cycle of production from sowing to harvest lasts about six months. Above is the crop calendar for corn and sunflower in Romania.

LABOR AND EMPLOYMENT[4]

Agriculture employs a large proportion (28.2 percent) of Romania's labor force. According to the National Rural Development Plan (PNDR), young farmers (under the age of 40) represent only 10 percent of the agricultural population and work only 10 percent of the UAA. By contrast, 43 percent of farmers are over retirement age (65 years) and work 31 percent of the UAA. In some areas, the labor shortage is high due to lack of interest in working in the agriculture sector and it is difficult for growers to find daily workers.

AMENDMENTS TO THE ROMANIAN LABOR LAW

An important set of amendments to the Romanian Labor Code relevant to the agriculture sector was made on April 30, 2011. Law no. 40/2011 incorporated a number of reforms advocated by the business community to introduce more flexibility into the labor market. The new law favors employers by allowing flexible contracts and part-time employment. As discussed later in the report, the possibility of hiring daily casual workers is widely practiced in the agriculture sector, leading to "casualization"[5] of the workforce. For seasonal (daily) workers, the new law introduces some formality, as daily workers are required to sign each day the official registry book and provide their name and social security number. However, the law does not give daily workers the capacity to participate in the public pension plan, or social security and health insurance systems (Art. 8.1.). Daily workers are not required to make social contributions (Art. 8.2.). The local law is less protective than the FLA Workplace Code of Conduct, as it does not require work contracts or payment of pension and social security by employers.

The country has limited resources for labor inspection. There is only one labor inspector for the entire Iasi region, who travels on a motorbike to visit farms. Thus, even where there are labor laws in place, there is lack of effective enforcement mechanisms.

4 Source: www.agri-planet.com/

5 Casualization is defined as the increase of part-time and casual jobs instead of permanent jobs.

CONCLUSIONS ON COUNTRY LABOR RISKS

Based on background research, interviews with external and internal stakeholders, and review of national policies and laws, Romania is at level 2, or "medium risk", based on the FLA Country Risk Matrix (Box 1).

III. RISKS RELATED TO SUPPLY CHAIN MANAGEMENT SYSTEMS

Many multinational companies operate in Romania for production of hybrid seeds, each with their own supply chain management systems. For the purposes of this mapping, we reviewed the supply chain management structure used by Syngenta. The review of the supply chain reflects some of the challenges and gaps in the internal management systems that exist across the agriculture sector.

For the production of hybrid corn and sunflower seeds in Romania, Syngenta enters into a production agreement with a local third party seed organizer (a company working closely with the growers in the region). The production agreement with the seed organizer is a buy-back arrangement, whereby Syngenta supplies the foundation seed to the organizer (at no cost) and sets the procurement price that Syngenta will pay for the seed product at the end of the season. The agreement specifies the type and quantity of seed to be produced, quality of seed expected, and service charges or commissions to be paid to the seed organizer. Syngenta advances production capital to the seed organizer.

It is the responsibility of the seed organizer to identify farmers to produce the seed according to the targets set in the production agreement. The seed organizer determines the production area and number of farmers based on targets set by Syngenta. The average size of the farms is about 600 ha, of which only a small part is used for Syngenta seeds. Individual agreements are then made between the seed organizer and each farmer, which replicate the terms and conditions set by Syngenta in the production agreement with the seed organizer. Most of the farmers producing seeds for Syngenta grow corn and sunflower on their own farms. The seed organizer also provides crop protection chemicals to the growers and is involved in seed processing and extraction.

Although Syngenta is not directly involved in the agreements with seed farmers, the company does have substantial influence over farmers and their production processes through the supply of foundation seed, fixing of procurement prices, and quality supervision. Syngenta's field staff makes frequent visits to the fields to check that standards are followed and maintained in seed production.

BOX 1: COUNTRY RISK MATRIX

- High Risk: The labor rights environment of the country is evaluated at Level 1 when the national law is contrary to international law or FLA principles and benchmarks.
- Medium Risk: Level 2 corresponds to countries where lack of implementation of the local law and some controversies in the local labor code have been raised by various research studies (State department, ILO, etc.).
- Moderate Risk: Level 3 is associated with countries where there is effective implementation of the local law by government bodies, such as the labor inspectors, and lack of any major disputes. It is also the case when implementation of the FLA Code is not hampered by government policies or other factors within the country.
- Low Risk: Level 4 is applied when, in addition to meeting all the requirements of Level 3, initiatives by a country promote best practices (for example the recruitment of disabled people in France).

In order to define the risks which arise from the supply chain management systems, the assessment team reviewed policies, procedures, implementation, training and the companies' engagement with stakeholders. The interview framework with management is presented in Box 2.

POLICIES

Syngenta has adopted a Code of Conduct outlining labor standards across its global supply chain. Syngenta's code covers all elements of the FLA Workplace Code of Conduct. These code elements are adapted to form policies that are implemented at the regional level.

In Romania, there is lack of regional policies and visible commitment made by different actors (e.g., companies, farmers) to practice corporate social responsibility (CSR) in the supply chain. To be effective, policies need to be part of contracts between companies and seed organizers for production of any commodity. Further, the policies need to be clearly defined and linked to specific objectives. For example, the lack of a common definition and understanding of "work accident" between the different growers and seed organizers could result in an arbitrary system of addressing work accidents and injuries, and poses risks for health and safety labor violations.

The research team observed a general lack of awareness among growers regarding CSR or relevant workplace codes of conduct. Growers and workers need to be aware of the applicable policies, and therefore, these should be communicated in a suitable manner (e.g., displaying the code of conduct in workers' native language on the farm, or handing copies out to the workers in the form of an internal rule book). Only some health and safety provisions and compensation rates (wages are clearly set in the registry book for daily workers and in the contracts for permanent workers) are communicated at the farm level. Consequently, growers are not aware of all the code of conduct provisions and workers are not aware of their rights, which inevitably could lead to the risk of labor violations.

BOX 2

The interviews were structured to allow analysis of the integration of labor standards into management systems:

- Are the policies transparent to internal as well as external stakeholders, such as families of seasonal workers, and how are such policies made visible (e.g., through radio announcements, billboards in the vernacular, drawings)?
- Are intermediaries, supervisors and managers trained to implement local labor law?
- What kind of trainings, processes, resources and responsibilities are set up at farm level to ensure application of local labor law?
- Do the implementers receive sanctions or incentives (e.g., are child labor prohibitions and related sanctions included in contracts with seed organizers)?
- What are the stakeholders' views on policies, implementation and outcomes?

The team especially noticed a lack of awareness and understanding of policies related to discrimination, harassment, abuse and disciplinary actions. Managers do not believe that harassment or abuse cases can happen and do not see any benefits of establishing a grievance system, even though the risk of discrimination, harassment and abuse is high at the farm level, as farms mainly operate with daily workers in high peak season and have different payment structures and benefits compared to regular/permanent workers. According to managers, "if a worker has a problem, he/she can come and talk to the grower or the supervisor."

PROCEDURES AND IMPLEMENTATION

Lack of communication and understanding of formal policies translates into lack of standard procedures in the supply chain, as well as at the farm level. Effective procedures need to be implemented to ensure implementation of local labor law, codes of conduct or companies' policies in the entire supply chain. The absence of defined objectives linked to the policies makes it difficult for field staff to reach compliance. In the visited farms it was noticed that in general there is absence of management systems. To the extent they might exist, they are ineffective. There is lack of clear and well-defined procedures with respect to labor standards that are understood by the management or workers. This makes the workplace susceptible to high risks of noncompliances due to arbitrary decision-making and actions.

Recruitment, Hiring and Personnel Development

The farms producing corn and sunflower seeds employ local labor on a daily basis. To recruit daily workers, all farms visited indicated they used the informal network of middlemen who often are leaders in villages around the farms. There is no formal procedure to hire seasonal or daily workers. Many daily workers are from the Roma community, and lack social protection and are unaware of their rights, according to local experts. According to the managers and growers, these workers are hired due to acute labor shortages during peak season, even though they are less reliable and skilled than other workers. The informal recruitment process for daily workers presents discrimination risks and in general prevents workers from knowing their responsibilities and benefits, as policies and procedures are not explained to them at the time of recruitment.

Daily workers at Semrom factory processing corn.

Recruitment and hiring procedures are more formalized for permanent workers. Growers often hire permanent workers through labor agencies and provide them with a written contract containing a basic job description and provisions on working hours and wages. However, personnel development and promotion systems are arbitrarily managed and leave room for unfair practices. For example, there is no formal procedure for becoming a supervisor, and promotions depend solely on the grower's will. Management of workers is often done in a paternalist way, with the grower being a strong figure close to the workers and having a great influence on them. No management systems could be identified at the farms to reduce worker turnover and retain the workforce (in spite of labor shortages).

Age Verification Process

As mentioned earlier in this report, daily workers are required to sign a registry book each day, which is provided to the farms and subsequently collected by the labor inspector. Workers write their names, social security numbers and affix their signatures in this registry book. The new (April 2011) legal obligation to register workers' social security numbers is a good overall age verification process. However, this requirement alone does not ensure the elimination of child labor risks, such as:

- work during peak production season, which corresponds to school holidays;
- daily workers often come to the fields with their families (and family members are not listed in the registry book); and
- there is only one labor inspector for the entire Iasi region, which makes it very difficult to monitor the conditions on each farm.

It is therefore necessary for the farms to develop internal mechanisms for age verification. Even in the presence of an age verification process, young workers (15-18 years old) are at risk; there is no specific framework or job description for young workers (such as reduced working hours, prohibition on hazardous work, ban on exposure to chemicals, etc.). Currently, young workers are treated the same as adult workers. Protections for young workers are necessary particularly with respect to health, safety and hours of work.

Grievance Mechanism and Disciplinary Measures

Workers should have the opportunity to anonymously report any issues arising regarding labor standards. During this mapping, only one channel of grievance reporting was observed in the region. There is no "alert system" that can be used by workers facing an immediate issue such as discrimination, health and safety issues or harassment or abuse, except through the labor inspector. The existing "green number"[6] (which was not observed anywhere on the farms) is only used to denounce moonlight work (undeclared workers that work illegally so as not to pay social contributions). Further, there is no appeal process available to the workers.

There are no clear rules and procedures to handle disciplinary issues. The local law sets out a procedure for financial sanctions, but this was not followed in the visited farms where cases of disproportionate financial sanctions were observed. Permanent workers can be fined one or two months' salary, and daily workers one-day salary (their names were crossed in the daily registry book). There was, for example, a case of a substantial fine (salary deduction) against a worker for exceeding the speed limit while driving a company truck and financial sanctions to combat alcoholism, a major social problem in the region. Decisions are arbitrary and can lead to discrimination and unfair practices.

Hours of Work

The Romanian Labor Code stipulates a working week of 48 hours, with one rest day. Daily working hours can extend up to a maximum of 12 hours per day for daily workers. Young workers (15-18 years old) can work six hours per day. Currently there are no procedures at the farms to monitor, control or report working hours, either for daily or permanent workers. Registry books for daily workers and payrolls for permanent workers record working days but do not specify the

6 A phone number that can be used by any worker to inform the labor inspector about any abusive situation.

number of hours worked. The books only attest which workers have worked on which day, but do not record arrival and departure times. The legally authorized maximum working hours are consistently exceeded (especially during high peak season when workers often work 12 hours per day), but the overtime hours are not calculated. There is an informal agreement with permanent workers whereby they understand that they will work more hours in high peak season and fewer hours in low season. Consequently, it is difficult for growers, seed organizers or a company to monitor the total hours worked per day, overtime hours, and related compensation. This is particularly problematic for young workers, who legally should not work more than six hours per day.

Compensation

Management usually fixes wages based on local law and labor market conditions (prevailing market rate, availability of workers, unemployment rate). Salary grids for permanent workers were available on some of the visited farms. Both the permanent and daily workers were found to be receiving the legal minimum wage or more, in some cases. Wages vary from one farm to another for similar work. This can be attributed to labor shortages in certain areas, where the growers pay higher wages in order to attract workers. For daily workers, there are no wage differentials among men, women and young workers.

Local laws affecting daily workers were generally found to be respected, with the exception of the provision on daily payment. The new law (April 2011) allows unlimited recruitment of daily workers (all year long) with the sole condition of paying wages at the end of each workday. This generates extra work and time for administrative staff. Workers have to queue for a long time

Daily workers receive payment at a farm.

after a long day of work to get their salary. Consequently, the farms often space out payment of daily wages, so that they end up being paid every 2-3 days or even weekly. This forces daily workers to come back the next day in order to receive their payment. There is therefore a risk of forced labor (including overtime) and non-payment of wages. The labor shortage in some areas reinforces this risk, as growers could use it as a way to ensure the presence of workers during peak season.

Permanent and daily workers are paid for eight hours per day, irrespective of the number of hours they effectively work. Overtime is therefore not compensated even if workers work for 12 hours per day during peak season. Additionally, the registry book for daily workers and daily payment requirement means that workers have to arrive early to register and stay late to receive their pay. The number of unpaid hours thereby becomes even higher. The number of hours is also higher for HR and accounting staff during the peak season.

Chemical storage at a farm.

Health & Safety

The absence of formalized policies, procedures, training and evaluation processes for workers and supervisors makes for a high risk of health and safety issues. A detailed list of potential health and safety issues is included in Annex I.

Local law requires that growers provide an annual health and safety training to permanent workers. Each employee has a personal book that he/she signs after trainings. Daily workers are also supposed to have a ten-minute training on health and safety every morning before they start working. A list of workers participating in the training, which is made available to the labor inspector, was present at the farms. The team was not able to cross-verify the documentation with worker interviews, which should be done in future visits.

Procedures related to work accidents are not formalized and are dependent on the managers' judgment. There is no reporting on work accidents, except for serious cases when the worker has to be taken to a hospital. However, this has not happened in the past 5 years on any of the visited farms. It is therefore not possible to gauge trends in work accidents and their possible root causes.

There are no ergonomic measures in place to prevent occupational diseases for workers, including pregnant women and young workers.

Procedures and actual use of personal protective equipment (PPE) is weak, and the hazards of handling chemicals are high due to a lack of informational notice boards, drawings, re-entry processes, or awareness-raising for families and children living close to the fields. While the third-party seed organizers sell pesticides and herbicides to growers, they do not engage in activities to build awareness around proper handling and usage of chemicals and PPE.

TRAINING

Training and awareness-building activities on labor standards were not observed at any level of the supply chain. The lack of training is particularly problematic for health and safety issues. For example, there is no formalized worker safety training program on the handling of chemicals, restricted re-entry intervals (REI), or use of PPE while working in seed processing units with high noise levels. Since the application of chemicals has an effect on people residing near the farms, training for women and children who live in and around the farms is also necessary.

Corn seeds drying and shelling at a factory.

IV. TASK & RISK MAPPING OF CORN AND SUNFLOWER PRODUCTION

Task and risk mapping for sunflower (Table 1) and corn (Table 2) seed production is presented below. Task and risk mappings define all tasks and work activities that workers perform within each of the major phases in seed production. The required skills are elaborated and labor risks are attached to each step.

It should be noted that the field visit took place during the harvest season and therefore the mapping is not definitive. A follow-up visit should be conducted during the peak season (pollination, detasseling and rogging) to complete the findings (including a job hazard review). During peak season, the number of hired seasonal workers can double or triple the regular number of employees on a farm. In a further investigation, interviews with individual workers who are engaged in the performance of the tasks in each phase should be conducted. This includes collecting information on hours of work, wages, whether workers perform other activities outside of their work at the farm, and other demographic information about the respondents' (age, gender, education level, migrant and permanent or temporary work status).

TABLE 1: TASK AND RISK MAPPING FOR SUNFLOWER

PHASE OF PRODUCTION	TASKS/ACTIVITIES	SKILLS REQUIRED	LABOR RISKS
1. Land preparation (during fall, just after harvesting)	• Plowing to clean the fields (machines) • Applying fertilizers (machines) • Finishing land preparation to maintain water in the soil (machines)	• Knowledge of handling, maintenance and repair of tractor, disks, combines (certificate) • Knowledge of contouring to prevent soil erosion	• Job profiles require training; usually, mechanics perform equipment maintenance tasks • Women are excluded from these jobs; training to become a mechanic is not accessible to women
2. Application of chemical fertilizers (nitrogen) and pesticides (during spring)	Below are listed the tasks that are commonly performed for pesticide application. In green are the tasks that were not observed during the visits • QC provides seeds and pesticides, takes care of the irrigation, and makes advance payments • Unlocking and selecting crop protection products to be used • Preparation of protective gear • Mixing crop protection product (insecticides, fungicides, herbicides and foliates) • Loading chemicals into sprayers (machines) • Cleanup of contaminated loading site • Storage and/or disposal of containers	• Operation, maintenance of sprayers • Maintenance of protective gear • Knowledge of Integrated Pest Management (IPM) • Knowledge of agro-chemicals, their application, posting requirements, restricted re-entry interval, required protective gear, etc. • Knowledge of external signs and symptoms of pesticide poisoning • Knowledge of first-aid for pesticide exposure and poisoning • Knowledge of proper storage and disposal of pesticide containers • Knowledge of decontamination of mixing and loading sites	• Herbicides, insecticides and fungicides are applied by adults trained as mechanics • There is no involvement of children under the age of 15 in this phase, as the process is mechanized • Special attention should be given to surrounding population and to the re-entry period • It is necessary to check that all tasks highlighted in green are performed and that workers are well-trained • Responsibility of QC is important as they are selling pesticides to growers

TABLE 1: TASK AND RISK MAPPING FOR SUNFLOWER			
PHASE OF PRODUCTION	TASKS/ACTIVITIES	SKILLS REQUIRED	LABOR RISKS
2. continued	• Transporting sprayers to farm site where application will occur • Postings in areas where application will occur according to the law • Application of crop protection products by machines • Transport of sprayers back to storage site for decontamination • Cleanup and maintenance of spraying equipment, protective gear and truck used for transporting spraying equipment • Storage of equipment and protective gear • Showering and change of clothing for workers engaged in activity • Proper washing of work clothes of workers	• Knowledge of maintaining inventory of supplies • Knowledge of record keeping related to applications and accidents or poisonings	.
3. Sowing/seed planting (during spring; decided by the buyer, who sends a specialist/ agronomist to approve)	• Seed planting using machines (quite technical and requires great regularity)	• Highly skilled workers; very technical task that is crucial for quality seed production	• Permanent workers are technician-mechanics who have specific training from technical school and who gained experience and more technical skills onsite
4. Mechanical and chemical weed treatment (when crops have 6-8 leaves)	• Pesticide using spraying machines (quite technical)	• Skilled workers being trained in application of chemical products and in possession of a license. Mostly done by permanent workers	• Labor risks arise when workers do not make use of Personal Protective Equipment (PPE)
5. Phytosanitary treatment (when crops have 8-10 leaves and again when they are flowering)	• Same as phase 2	• Same as phase 2	• Same as phase 2
6. Pollination, using minimum 4 families of bees per hectare for about 10 to 14 days	• 10-15 seasonal workers are employed in each field to cut the buds of female plants that are not sterile • 2-3 technicians to supervise the work • They go to the fields early in the morning when the bees are less active • According to the growers, workers use masks and PPE • When bees are in the fields, they warn the mayor who alerts the village population	• Knowledge of bees • Knowledge and use of protective gear and implements (smokers) when handling bees • Knowledge of first aid when stings occur • Knowledge of emergency procedures if anaphylactic shock occurs	• Seasonal workers are not trained • Risks have already been identified by Syngenta production managers in Toulouse

TABLE 1: TASK AND RISK MAPPING FOR SUNFLOWER			
PHASE OF PRODUCTION	TASKS/ACTIVITIES	SKILLS REQUIRED	LABOR RISKS
7. 3rd phytosanitary treatment (end of June)	• Same as phase 2	• Same as phase 2	• Same as phase 2
8. Rogging (occurs all season long to eliminate atypical plants)	• About 10 seasonal workers who work for the entire season (permanent seasonal workers) • Specific Seasonal workers use hoe and/or machetes to clear weeds and cut out irregular plants that may interfere with quality	• Safe use of hoe and/or machete • Knowledge of sunflower growth stages • Knowledge of worker safety • Use and maintenance of personal protective gear	• Risk of heat stress and dehydration, due to heat index, sun exposure and heavy workload • Risks of cuts from use of machete and hoe • Risks of injury due to trip hazards/falls • Blisters on hands • Carpal tunnel syndrome due to repetitive motion • Injury to back and shoulders from long hours of hoeing and swinging the machete • Workers functioning without adequate worker safety training
9. Harvesting (end of August)	• Mechanical, performed by permanent workers • Seasonal daily workers to finish work manually	• Operation of mechanical harvesters • Safe maintenance of mechanical harvesters (due to jams that occur while in the field)	• Risks of severe injury when attempting to clear jams to the harvester equipment while harvesting in the field

TABLE 2: TASK AND RISK MAPPING FOR CORN			
PHASE OF PRODUCTION	TASKS/ACTIVITIES	SKILLS REQUIRED	LABOR RISKS
1. Land preparation	• Same as sunflower seeds	• Same as sunflower seeds	• Same as sunflower seeds
2. Application of chemical fertilizers (nitrogen) and pesticides (during spring)	• Same as sunflower seeds	• Same as sunflower seeds	• Same as sunflower seeds • According to management in Toulouse, use of pesticides, fungicides and re-entry can be problematic
3. Sowing / Seed planting	• Same as sunflower seeds	• Same as sunflower seeds	• Same as sunflower seeds
4. Mechanical and chemical weed treatment)	• Same as sunflower seeds	• Same as sunflower seeds	• Same as sunflower seeds
5. Rogging	• Seasonal workers use hoe and/or machetes to clear weeds and cut out irregular plants that may interfere with quality	• Safe use of hoe and/or machete • Knowledge of corn growth stages • Knowledge of worker safety • Use and maintenance of personal protective gear	• Risk of heat stress and dehydration, due to heat index, sun exposure and heavy workload • Risks of cuts from use of machete and hoe • Risks of injury due to trip hazards/falls • Blisters on hands • Carpal tunnel syndrome due to repetitive motion • Injury to back and shoulders from long hours of hoeing and swinging the machete • Workers functioning without adequate worker safety training
6. Detasseling	• Removing tassels • It takes about 200 to 300 hours per hectare of mechanical work. However, as panicles do not grow all at the same time, it still takes about 3 hours/hectare to manually finish the detasseling work	• According to Syngenta Toulouse, the skills required are not very high except for mechanical detasseling	• According to QC, it is often difficult to find workers • Risks linked to the hours of work and health and safety, as workers work for 12 hours per day, 7 days per week • According to QC, children can only work “when they are tall enough to work”
7. Harvesting	• Mostly mechanical	• Operation of mechanical harvesters • Safe maintenance of mechanical harvesters (due to jams that occur while in the field)	• Risks of severe injury when attempting to clear jams to the harvester equipment while harvesting in the field • For Syngenta-managed farms, women and workers under 18 are excluded from this activity • No observation possible for grower-managed operations or third party contractors; unknown if women or youth are involved in this activity

V. CONCLUSION

The assessment found several risks in terms of compliance with labor laws and the FLA Code of Conduct. Romania's labor laws for the agriculture sector are not always enforced, and are weak for daily workers. The cultural practice of discrimination against women is deeply rooted in the community with respect to gender-based job profiles (for example, where women are discouraged from obtaining certain technical skills and working as mechanics). These country-level risks are, however, beyond the immediate control of companies, and therefore it is necessary to engage with external stakeholders as a long-term strategy.

Companies producing hybrid seeds along with seed organizers have full control over the farms and the workers employed in the farms from where they source. Certain steps can be taken by the private sector to reduce risks of labor standards violations at the farm level. These steps would be primarily targeted at strengthening developing employment relationships, systems for young workers, health and safety, grievance handling and disciplinary measures. Companies, seed organizers and growers should start proper monitoring of total hours of work and compensate workers according to legal requirements.

In this context, FLA makes the following short-, mid- and long-term recommendations to seed companies sourcing from growers in Romania:

SHORT-TERM

- Conduct in-depth analysis of FLA Code of Conduct and local law, especially as they apply to daily workers, and convey this information to the seed organizers so that they can have an immediate impact on the supply chain..
- Seed companies and seed organizers should require that legal provisions on hours of work be respected. In order to comply with the provision on hours of work for young workers (above minimum age, but below 18), it is necessary to implement a reporting system to keep track of the hours effectively worked. For that purpose, the registry book for daily workers is not sufficient, as it does not track arrival and departure times. Farms need to create an electronic list of workers to allow proper recording of the hours and days worked by each worker.
- In order to comply with the law and the maximum of 90 days of work provision for daily workers, details on the tasks performed, hours worked, PPE provided, etc., must be documented. This documentation, including workers' profile, could also be a good way to develop loyalty from the workers as it could be linked to a promotion system or a system of bonus for loyalty.
- Disciplinary sanctions need to be strictly applied in accordance with the law and internal regulations (clear and visible procedures). It is also necessary for sanctions to be recorded in a separate book and on the registry book for daily workers, providing background and details of the sanction.

- Special attention should be given to health and safety issues linked to pesticide usage and summer heat. Those issues should be regularly monitored.
- Policies and procedures, or at a minimum internal rules, should be posted in the farms. It would also be helpful to implement a comprehensive grievance system.

MID- AND LONG-TERM

- Define policy with associated objectives so that it can be understood and implemented at all levels of the supply chain.
- The policy and commitment of seed companies must be more visible and formalized at the seed organizer level. Managers should be trained as a first step, and growers and supervisors as a second step.
- Planning for the peak season could be done months in advance with relevant stakeholders. Concerns that have to be taken into account include: how to retain workers from one year/season to the next, how to integrate teenagers into a vocational training programs,and how to make sure young workers will not exceed working hours.
- Growers should establish HR management systems and have HR policies that support the staff. The policy must bring bring transparency and objectivity to the hiring process, establish a promotion system, and outline disciplinary sanctions. The policy must be visible, communicated to the workers and supported by HR and other managers. The policy must be then implemented through clear procedures, especially for hiring and promotion processes.
- Rethink the recruitment system to avoid using informal agents or brokers. Make relationships more transparent to avoid discrimination when allocating tasks, promoting workers or sanctioning them.
- When a union is not present, provide workers with transparent and objective information and enable them to express themselves through an effective grievance system.
- Identifiy key stakeholders and promote community building. As an example, we observed that priests are very strong figures in the villages and can have a great influence on villagers.
- Map the projects and identify training opportunities. Better training for growers and better knowledge about irrigation techniques would be very beneficial. After the mapping is completed, seed companies could transfer competences through vocational training in order to improve the quality of production and workers' conditions.

ANNEX I: HEALTH AND SAFETY RISKS

Biological hazards: Sunflowers are pollinated by bees. Stings or bites by bees, insects, and snakes can cause skin irritation and allergic reactions. The health effects of stinging or biting insects can range from mild discomfort or pain to a lethal reaction for those workers allergic to bees or insect venom. Adult workers typically are aware if they are allergic; however, for children who have not had previous exposure, allergic reactions may not be evident until an incident at the farm occurs. No farms visited reported any formal procedure or having on hand epinephrine or an "EpiPen", a well-known medication to prevent severe allergic reactions to bee stings.

Ultraviolet (UV) radiation: Workers reported working outside between 6 a.m. and 8 p.m., which places them at risk of exposure to UV rays. Workers are at risk of UV radiation even on cloudy days, but the highest exposure is during dry season. Given the hot temperatures in summer and the need to work in direct sunlight, there is a high risk of UV radiation. This can be compounded by heat stress and dehydration. Children are much more susceptible to heat stress and dehydration. Excessive exposure without appropriate protection can result in sunburn ranging from minor to severe. Chronic exposure of eyes to sunlight may cause pterygium (tissue growth that leads to blindness), cataracts, and macular degeneration, a leading cause of blindness. Further, skin cancers can develop over time, ranging from basal cell, to squamous cell and melanoma. Taking periodic breaks and drinking water can help to prevent heat stress. Farmers indicated that they provide drinking water to workers, but there is no formalized process for breaks.

Toxins: Workers can carry hazardous substances home from work on their clothes, bodies, tools, and other items. Workers unknowingly expose their families to these substances, which can have various health effects. At especially high risk are the family members of those workers that mix, load and apply agro-chemicals, particularly those workers that do not appropriately wear protective gear. When both parents are engaged in the application of agro-chemicals, the children are at even greater risk of exposure. According to a study conducted by NIOSH that involved 28 countries[7], the incidents of take-home toxins among workers' families resulted in a wide range of health effects, including respiratory problems, neurologic disorders, and fatal poisonings. The means by which hazardous substances have reached workers' homes and families include: work clothing (directly or through washing work clothes with family clothes), tools and equipment, taking items home from work (such as bags, rags, plastic jugs and other containers), the worker's body (coming into contact with family members before showering and changing clothes), and family members entering work areas. Of the farms visited, none had a controlled decontamination facility equipped with showers available for workers who had been engaged in mixing, loading and applying chemicals, or for cleaning protective gear with controlled contaminated water run-off. No apparent control for decontaminating of the vehicles and the residual water run-off was visible (machines).

7 www.cdc.gov/niosh/docs/97-125/