

## **INTRO**

Agriculture is a vital industry that affects society in many ways. It provides raw materials, supports international trade, employment, sustains life, drives economic growth, promotes sustainability, etc. However, it comes with its challenges that can also have a significant financial impact on agricultural business owners. Fortunately, Teltonika Telematics offers a practical solution to these concerns with autonomous GPS tracking.

# **CHALLENGE**

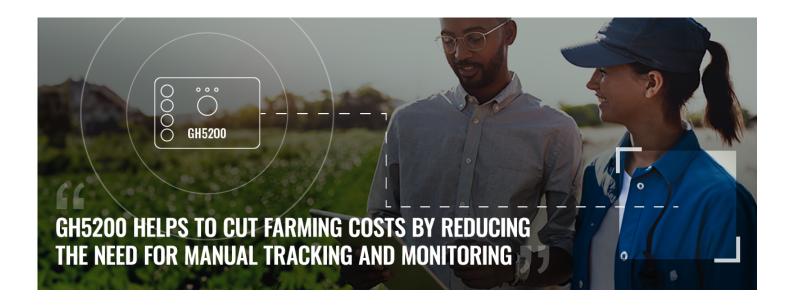
According to the World Bank, employment in agriculture (% of total employment) was 26.42% in 2021. However, this percentage varies greatly from country to country. Worldwide, more than one billion people are employed in agriculture, accounting for one in three workers. The number of working people in the sector reached over one billion in 2009, and although employment growth in agriculture has slowed, it is still an important source of employment in many countries.

Owners of farms, ranches, plantations, and all types of agricultural businesses face a number of challenges that need to be addressed. First of all, the protection, safety, and accountability of workers in the industry. It is one of the most dangerous occupations, with high rates of death and serious injury - falls from heights (ladders or grain bins), being struck by an object or vehicle, chemical exposure, tractor overturns, animal-related injuries, entanglements, fractures, head injuries, burns, suffocation from exposer to dust, etc. All of these can have serious financial, legal, and moral consequences.

Another significant challenge - thefts. Globally, the annual cost of agricultural theft is estimated to be between \$10 and \$15 billion. This figure includes the cost of stolen crops, livestock, and equipment, as well as the cost of increased security measures. For example, in 2022, the Indian government estimated that agricultural theft cost farmers over \$2 billion.



Overall, the theft of agricultural products is a growing concern globally, with thieves increasingly targeting agricultural products as global food insecurity increases and inflation pushes up the price of goods, such as fresh produce, consumables, and fuel. Thankfully, Teltonika Telematics has a practical solution to overcome these obstacles and help the industry.



#### **SOLUTION**

To showcase the solution, we use Teltonika GH5200 model - an autonomous 2G tracker designed for personal security and workforce management. Comfortable to wear and easy to use, this compact tracking device offers two-way voice communication for instant contact with up to five call/SMS recipients in emergencies. Its five programmable buttons can be customised for different scenarios, such as Man-Down detection, No Movement event, On-Demand tracking, and more.

Mainly, the Man-Down detection, alarm, and immobility scenarios are used to ensure the safety of workers and/or vulnerable people. With extended battery life and compatibility with a wide range of Bluetooth sensors, the model is a versatile tool for enhancing personal safety and improving workforce productivity.

How it works – the GH5200 personal GPS tracker should be made available to all farm, ranch or other agricultural establishments workers of interest. The main function of the device is to track the location of each person. It uses GNSS satellite technology to pinpoint the exact location of the tracker (and therefore the worker wearing it). The GH5200 transmits this location data via the GPRS network to a dedicated server, allowing employers, agricultural or safety managers to monitor the worker's location in real time.

This autonomous tracker is designed for personal safety and workforce management, including applications in the agricultural industry. Teltonika GH5200 is equipped with a range of features to ensure worker safety and productivity.

Two-way voice communication for emergency situations. The GH5200 supports up to 5 call/SMS recipients. This feature allows the device to instantly send a text message or initiate a call when immediate help is needed. This is particularly useful in the agricultural industry where workers often work in remote or isolated locations.

Configurable buttons for personalised usage scenarios. The GPS tracker comes with 5 programmable buttons that can be used for different scenarios, such as Amber Alert, Action-on-Call, On-Demand Tracking and many other events. This allows for a personalised user experience and can be tailored to the specific needs of the agricultural worker.



Built-in man-down, alarm, and immobility scenarios. The GH5200 has special pre-programmed scenarios to ensure the personal safety of lone workers and vulnerable people. These scenarios can detect if a worker has fallen (Man-Down event), trigger an alarm or detect if there has been no movement for a specified period. This is critical in the agricultural industry where workers can be exposed to a variety of hazards.

Imagine a large farm, ranch, plantation, or hacienda owned by a corporation with hundreds or even thousands of employees. Each worker is equipped with a Teltonika GH5200 model. Compared to old-fashioned farming, what difference does it make?

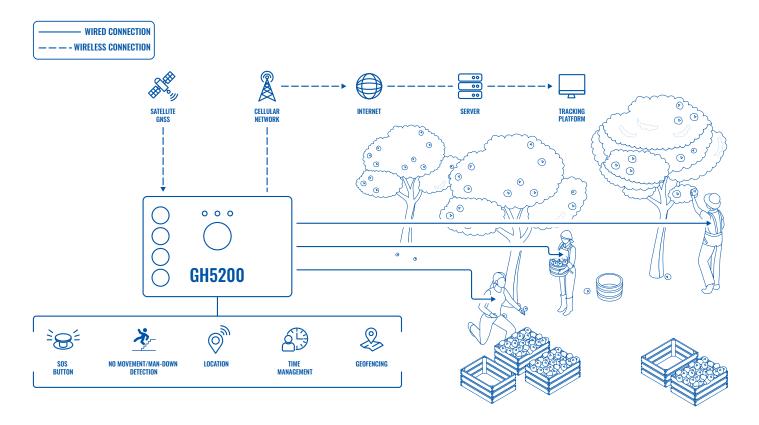
Firstly, the GPS tracker is a guardian angel for your workers. If a worker feels unwell or has an emergency, a simple press of the SOS button sends an alert to the person in charge. The GH5200 is also vigilant, detecting if a worker has fallen and is motionless, triggering an emergency call to the relevant authorities and/or supervisors.

Second, the device is a management's eyes and ears on the ground. Teltonika smart badge continuously tracks employee movements, ensuring efficiency and eliminating wasted time. It records check-in and check-out times and monitors movement around the site, all without the need for paperwork or micromanagement.

Finally, it's an intelligent management tool. With accurate geo-fencing, managers and supervisors can allocate teams to different areas of the site, compare productivity levels and ensure workers don't enter restricted areas. If theft does occur, the badge increases the likelihood of catching the offender.

In summary, Teltonika GH5200 autonomous tracker is a comprehensive solution for tracking and ensuring the safety of workers in the agricultural industry. Its features are designed to meet the unique needs and challenges of these workers, making it an essential workforce management tool. Even more, thanks to our extensive fleet tracking portfolio, farm owners can also track all agricultural vehicles, machinery and any industry-specific equipment or accessories.

### **TOPOLOGY**





#### **BENEFITS**

- Improved safety and security the GH5200 can help to keep workers safe by tracking their location and movements. This can be especially helpful in large, remote farms where workers may be working alone. GPS trackers can also help to deter theft and vandalism by providing real-time location data.
- Increased efficiency Teltonika trackers assist to improve efficiency by tracking the movements of workers and equipment. This information can be used to optimise routes, reduce overlap, and identify areas where productivity can be improved.
- Reduced costs autonomous GPS trackers can help to cut farming costs by reducing the need for manual tracking and monitoring. This can free up time and resources for other tasks, such as planning and scheduling. Teltonika trackers also help to reduce the risk of accidents and damage, which can save money in the long run.
- Improved compliance the GH5200 model can help to improve compliance with regulations by tracking the movements of workers and equipment. This information can be used to demonstrate compliance with safety regulations, labour laws, and environmental regulations.
- **Better decision-making** personal Teltonika trackers help to improve decision-making by providing real-time data about the workforce and the operation. This information can be used to make better decisions about things like staffing, scheduling, and resource allocation.
- Improved communication GPS tracking devices can help to improve communication between farmers and workers by providing real-time location data. This information can be used to keep workers informed about their assignments and to coordinate their activities.

#### WHY TELTONIKA?

Teltonika Telematics is a world leader in vehicle and asset telematics, offering a comprehensive range of certified GPS trackers, accessories, and sophisticated software solutions to help businesses of all sizes improve efficiency, competitiveness, reduce costs, and enhance safety.

With over 25 years of experience in the industry, Teltonika Telematics has a deep understanding of the needs of businesses in a variety of sectors, including logistics, transportation, fleet and workforce management, asset tracking, etc. The company's innovative products and services are used by customers and business partners in over 160 countries around the world.

Our tracking devices are designed to be easy to use and install, and the company offers a wide range of support options to help customers get the most out of their IoT Projects. The company's software platform provides a wealth of data and insights that can be used to improve fleet management, optimise routes, reduce fuel consumption and way more.

# FEATURED PRODUCT

GH5200

# **RELATED PRODUCTS**

**TMT250** 

