Why do global food processors strengthen FMG? (FMG = Farm Management Group)

Many global food processors strengthen their Farm Management Group. It calls several different names like Sustainable farming and Social impacts in farming. Why do global food processors specially care about their contracted farmers lately?
Climate change cause farming problem and Farming problem lower productivity and many contracted farmers turn to uncontracted. Then processors face the situation that It is no longer possible to guarantee a stable supply of raw materials.
Solving the production problem is the clue.

We can fix this situation with Data based farm management solution which can make decision and react by collecting, analysing data, and actuating devices.
Legacy method of FMG is face to face management and it cannot overcome the problems, because the indicators for purpose are not clear and it is getting harder and harder in the untact situation like now. So we need untact data-driven management way.
We’ve developed several full-stack system HW, backend, analysing tool and SW Service. But techs inside like backend system is never important to users.
If it fits the purpose of users, the simpler the more perfect.

If it fits the purpose of user, it’s the perfect solution for user. SMARF’s HWs are cheap because we cut off all the things but essential. It’s easy enough to install. A farmer can finish it alone in 15mins. Cut the pipe, attach system and scan qr code. That’s it. And we are trying to make WEB and APP as intuitive as we can. Underlying magics are LPWA network, ultra low power management, ML based pattern analysis, and so on but techy things are not that important in here.
The solution that raised the product rate of global food processors in POC tests 4 times over 2 years.

Avg. 29% product rate increase in potato (for chips) fields. [Orion(Korea), Orion(China), PEPSICO th(Thai)]

<table>
<thead>
<tr>
<th>Result</th>
<th>Yield</th>
<th>Premium Leaves</th>
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<tbody>
<tr>
<td>Conventional</td>
<td>400kg/rye</td>
<td>11.3%</td>
</tr>
<tr>
<td>SMARF + Vinyl mulching</td>
<td>436.26kg/rye</td>
<td>13.72%</td>
</tr>
<tr>
<td>SMARF + Straw mulching</td>
<td>475.86kg/rye</td>
<td>16%</td>
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It turns out that the solution works in tobacco field as well.

And it works. With Global food processors like Orion, PEPSICO and Tobacco authority of Thiland, We did 4 POC tests in Korea, China and Thailand. The solution raised product rate as well as quality index, of All 4 tests of 2 crops over 2 years.
Both processors and contracted farmers are satisfied

He was an office worker. 2 years after starting farming, he recorded the best product rate among all the Orion’s contracted Farms with SMARF. (23.1 ton/ha, 2018)

Mr. Chanin is a Pepsico’s contracted farmer. And he can harvest potatoes in off-season with SMARF. It is the first record in his region, Sankampeng.

Mr. Panot is the head of TOAT research center in Chiangrai. We are talking about using the solution for contracted farmers of TOAT.

Mr. Kim is a newbie farmer in potato chip industry. He’d been one of the best farmer in Orion group in just 1yr working with SMARF.

Of course, not only the processing companies but also the farmers were satisfied with the results. It’s natural because they earned extra money. Even if farmers pay for the service license to be paid in the future, the additional income is sweet enough.
We’ve done the systems and seen how it worked. Now we want to test how the business work. Our business model is Farm Management Platform as a Service. Processors and farmers use our HW and SW as a service like AWS IoT core service. We set our first market to ASEAN countries and we are thinking of flip our Korean headquarter to Singapore and leave Korean branch to R&D lab.