

## **Forestry Machine Business Contribution to Sustainable Forestry**

Q1: What level of profitability do you expect from forest machines for the current fiscal year and FY2024? What levels did you work toward for FY2020 and are you working toward for FY2024? What are your market shares of machines for CTL and FTL methods, respectively? What are your strengths and weaknesses in each method?

A1: There are two forestry methods, that is, the CTL method, which is developing mainly in Europe, and the FTL method centering in North America. Each method has its characteristics, and applicable machines are different. Our machines are largely for the CTL method. With respect to the CTL method, there are three major players, John Deere, Komatsu, and PONSSE. We are positioned around Number Two. On the FTL method market, which centers on North America, our market presence is low with merely a few percent market shares. However, we want to expand sales on a global basis as we generate synergy effects with our CTL technologies. The profitability of our forest machine business should remain not much different from that of the construction equipment business.

Q2: What about sales and revenues by region for FY2020 and FY2024?

A2: Concerning sales and revenues by region for FY2020, they centered in Europe and South America.

Q3: In response to COP26 resolutions, I suppose that there will be more environmental regulations to emerge. Are there any topics that should accelerate your efforts in the forest machine business?

A3: About six months before and after COP26, planting gained more attention than before. While it has become extremely challenging to reduce carbon credits, CO<sub>2</sub> absorption in the forest has attracted more attention. We have received many requests for our presentations of forest machines. With respect to logging, how to count credits (reduced and absorbed CO<sub>2</sub> emissions) has been discussed recently. From the head office of Komatsu Forest in Sweden, we have received a report about discussions in Europe, which indicate unfavorable opinions on logging in slow-growth forests.

Q4: What is the sales breakdown (machine sales and after-sales revenues) of the forest machine business? How about your main customers' industrial sectors?

A4: The proportions of machine sales and after-sales revenues are about the same as those of construction equipment. However, there are some regions where after-sales revenues are more than equipment sales. For example, some plantations in Brazil, engaging in intensive operations, maintain service contracts, consigning their entire operations with us. While our customers engage in forestry themselves in most countries, we generate a considerable large amount of service revenues in the regions where our customers purchase and operate machines intensively. Some of our customers invest in forest

resources. In Brazil and Indonesia, the leading planting companies for pulp constitute the majority of our customers. In Europe, we have many individual customers engaging in forestry.

Q5: While there are CTL and FTL methods in general, what are their shares in the market? Which methods are in the mainstream in Asia, South America, Russia, and Southeast Asia, where you are planning to expand sales?

A5: On a sales basis, we estimate a balance of 6:4 with FTL- and CTL-method machines, respectively. In North America, over 80% of total sales come from FTL-method machines. We also have a big market of FTL-method machines in some regions of Australia. North America produces the world's largest volume of logs, so we believe it's the largest market in the world. In Russia, Southeast Asia, and Brazil, the CTL method is in the mainstream. Russia is the largest CTL-method market in the world.

Q6: Are there any changes in the methods, for example is the FTL method growing in the CTL-method predominant regions? What are the merits and demerits of each method?

A6: While the methods are compared mainly in terms of costs in some emerging countries, we rarely see any change between the two methods at jobsites, because they have been established according to the subsequent supply chain. Concerning the merits and demerits, some customers prefer the CTL method because they are concerned about what they hear that happens when workers drag out lumber under the FTL method, which damages the soil seriously. However, said damage is not serious in forestry which has very long-term turnover periods of 60 to 70 years. This approach is very evident in the United States, so it's basically impossible to compare the two in terms of merits and demerits.

Q7: How can you strengthen the FTL method?

A7: We will review our options, including in-house development and M&A.

Q8: What are the reasons which you think will promote the growth of forestry into the future? Why has Komatsu decided to focus efforts on forestry? What are the reasons for limited market entry of other construction equipment makers?

A8: We don't know the real reasons. The market for forestry-exclusive machines is largely occupied by top players. Meanwhile, other companies supply machines by installing attachments to construction equipment as forest machines. Up to about 30 years ago, mainstream forestry had called for felling naturally grown trees by using chainsaws and logs were dragged out by bulldozers. In the 1990s, however, the shift from natural to man-made forests became dominant as a worldwide trend, and forestry-exclusive machines have been developed since then. So, high-efficiency forest machines did not exist in the past.

We believe forestry will grow into the future, because demand for lumber is increasing for

residential construction partly against the backdrop of recent decarbonization trends and other factors.

Q9: How many units of forest machines do you sell annually? Is the forest machine market growing?

A9: In terms of CTL-method machines made by KFAB, we sell about 900 to 1,000 units a year. In addition, we also sell forest machines based on construction equipment. Based on the statistics about CTL-method machines, it's been growing about 2% annually for the last 10 years.

Q10: Since FY2017 when you had the IR-Day meeting, have you made progress in the FTL method?

A10: In 2018, we acquired Quadoco, a maker of attachments for feller bunchers, and in 2019, TimberPro, a maker of FTL-method feller bunchers. We have been working to increase our own product line-up by learning the know-how of these acquired companies as our business stance. We have increased our line-up from 2017.

Q11: What is your competitive advantage in the forest machine business? I have learned that the market for CTL-method forest machines is in the oligopolistic state with three top players. Are there any obstacles to entering the market? To enter the market for FTL-method forest machines, is M&A effective?

A11: While there are some exclusive CTL-method forest machines which look like construction equipment, it's impossible to develop all these machines without a thorough understanding of forestry jobsites. Furthermore, as the number of units of one model and the timing of changing models are different from construction equipment, it's practically impossible for construction equipment makers to enter the market right away. Since 2017, we have acquired two makers of FTL-method products, because we also need to have that know-how, which is different from construction equipment. Although engines and some other components are the same as construction equipment, the ways in which forest machines are used are different from construction equipment, which requires know-how on the part of newcomers.

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