Prospective Indonesian Plywood in the Global Market

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Abstract—Since the mid-1980s, Indonesia has emerged as one of the biggest plywood suppliers in the world. Indonesian plywood has dominated many major markets around the world. However, due to economic crisis in 1997/1998 and other factors, the industry experienced a decline in overseas markets which in which influenced the production and trade sectors. In the last few years, Indonesian plywood industry has done many efforts of recovery, find new market and continue enhancement of products image in international market. To determine the potential future market for Indonesian plywood, current of Indonesian plywood and trend of plywood exported were investigated. For the purpose of the study, data export plywood to sixteen countries for five years (2008-2012) were collected. The obtained data was analyzed by using single exponential smoothing method. Mean Absolute Percentage Error (MAPE) and Mean Squared Error (MSE) are also used to calculating demand sales forecast accuracy. The average of total production plywood from Indonesia will significantly increase from 3.3 million m³ in 2012 to 3.5 million m³ in 2014. The most prospective market of Indonesian plywood is Japan and followed by China, Saudi Arabia, the United Kingdom and the United Arab Emirates.

Index Terms—indonesian plywood, demand market, single exponential smoothing method

I. INTRODUCTION

Indonesian plywood industry was set up in the later part of the 1960s and began to develop rapidly in 1980s, when the government issued a policy requiring every forest concessionaire to establish a wood-processing plant. This policy was followed by the banning of logs export in 1985 [1]. Over this period, Indonesia increased the value of its timber exports by applying heavy export taxes to discourage log exports and develop wood product exports especially plywood [2]. Immediately, after the log export banning policy was effectively applied in 1985, some industries which imported logs from Indonesia faced difficulty in continuing their production [3]. The banned log exports giving subsidies for plywood export to new markets especially to Japan and Korea. Indonesian industry policy made it as the largest plywood exporter in globally [4] with about 30 million m³ shipped out annually [5]. The government policy encouraged the growth of domestic wood industries, mainly the plywood industry, were only three companies, and it increased to 101 companies in 1980. It further increased in 1987 to 118 companies, and in 1992 the number of companies reached 120 [6].

During the period 1980-2007, Indonesian forest product industry mainly plywood industry has experienced rapid growth and structural change and played important part in Indonesia economy through a significant role as a gross domestic product, foreign exchange, government revenue, and employment contributors [7]. In rural areas, forestry and forest industries are even more important contributors to the regional economy [8]. The industrial country has absorbed the plywood from development country such as Indonesia. This trend has exploited the tropical rainforest and required attention for conservation field. The industry was developed to add value to raw material, to help industrialization, and to provide employment [9]. However, the rainforest products are not linear relationship between the demand and the supply capacities for the plywood. It needs more time to wait until the rainforest products can be utilized. The direct impact due to the deficit of raw materials is the decrease of wood industrial capacity, especially plywood industry from 99% in 2007 to 42% in 2005[10]. Furthermore, the production has declined to 3.1 million m³ in year 2008, a drop of 27% compared to 2007 [11]. In fact, growth in the plywood industry came at a cost. Domestic log production is tampered off as well as the trend of domestic log prices fell during 1980s and 1990s [12].

As increased the trend of economy in Asia, Japan ones of the country with positive economy, had put Indonesia as one of the largest rainforest products exporter with vary of products such as plywood, pulp, and sawn wood. Indonesia has export almost 40% plywood to Japan as potential market favorite. The next five largest importers of plywood at that time were, China at 14%, Europe at 10%, Korea at 9%, USA at 8% and Saudi Arabia at 4% of