

# A Comparative Analysis of Human Resource Management in Two Timber-Processing Enterprises: a Russian Enterprise and a Japanese-Russian Joint Venture

ERMACHKOVA Svetlana (FANUC Ltd.)

## Introduction

Ten years have already passed since the beginning of the transition of the Russian economy from a centrally planned economy to an economic system based on market principles. This transition is taking place with much difficulty. Enterprise managers in Russia do not have the experience of working under market conditions. "Communism lasted for more than 70 years in Russia... The longevity has negatively affected production structures, human capital, economic diversity, and a competitive spirit" (Barry 1999:46).

In order to develop a competitive private business environment, Russia needs market-oriented political, legal and institutional framework; accessible capital, especially for long-term investment; modern technology; new management practices, including Human Resource Management (HRM). Of the above requirements the last is the most important. "Through people skills, knowledge and performance, other factors can be effectively and efficiently used to achieve an organization's

goal" (DeCenzo and Robbins 1988:3).

One of the ways out of the present difficult economic situation is through cooperation with other countries, in particular, with Japan. This involves not only the granting of credit, but also foreign direct investment. Russia needs Japanese financial investment, the creation of jobs through the establishment of Japanese enterprises, and the transfer of the efficient Japanese management. The advance of Japanese companies into Russia will also be beneficial for Japan because of huge natural resources and cheap labor costs in Russia.

Based on the above-mentioned points, the objectives of this study are

- To compare HRM methods introduced in a Japanese subsidiary (Plant J) in Russia with the HRM methods of a Russian enterprise (Plant R) that has been operating since 1948 and exemplifies a traditional domestic state enterprise. For reliability of the research, both plants (J and R) engage in the same activity, timber-processing; have almost the same number of employees, and are located in the same area – the Irkutsk Region in Siberia –

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## [Key Words]

Russia, Japanese-Russian Joint Venture, Timber-Processing, Human-Resource Management, Market Economy

a region which is famous because of the huge stock of the world's best quality pine wood.

- Based on this comparison, to consider what can be learned from Plant J regarding HRM for Plant R, that, at present, is adapting to a market economy.

The paper consists of two parts. The first section examines the organization of work and production output results in both plants. The second section analyses the main HRM components of plants and highlights the HRM practices of Plant J that are effective and can be a model for Plant R and other plants.

The performance of Japanese subsidiaries in Russia has not yet been studied well. The objects of study of Japanese management scholars have been mainly Japanese companies in the US, Europe and Asia. In addition, scholars of other countries have not studied Japanese firms in Russia. Research about Russia -- Japan relations conducted by Russian scientists has been concerned more with macroeconomic and legal aspects than microeconomic ones. Also, "very little has been written in the West about Russian HRM policies and practices as they have evolved since the dissolution of the USSR" (Bostwick 1998:1).

With the transition to a market economy translation of foreign HRM textbooks has increased. For example, Grachyov (1994) in *Personnel Management in a Multinational Corporation* shows the strategy of HRM in 3M. Goncharov (1998) in his book *In Search of Management Improvement* describes HRM of big companies such as Motorola, IBM, and Sony. Pronnikov and Ladanov (1989) in *Personnel Management in Japan*, Volgin (1998) in *Japanese Experience of Solving Economic and Social-*

*Labor Problems* analyze Japanese HRM peculiarities.

Undoubtedly, the above-mentioned books are useful for study of progressive HRM practices; however, the books just describe the foreign experience. Therefore, "do not fit the Russian conditions adequately" (Egorshin 1999:3). It seems, that a better way of explaining HRM to Russian managers is by explaining practical situations and practical recommendations for Russian enterprises, based on foreign practices. Moreover, foreign experience that has already been adapted in Russian enterprises will have more practical significance. In view of this, the following books seem valuable.

Egorshin in *Personnel Management* (1999) critically reviews the foreign HRM in Ford, Nissan, Mitsubishi, Sony, etc. and gives practical recommendations for making HRM more effective in Russian plants: GAZ (the main Russian automobile maker), ZMZ (a plant producing car engines) and others. Shekshnya's book *Personnel Management in the Contemporary Organization* (1997) has the structure of an American HRM textbook; however, in addition to the theoretical explanation based on the western research concerning HRM, all practical examples are taken from contemporary Russian enterprises. The book has new Russian HRM examples that were not found in the previous researches.

Among examined 230 books, papers, articles, magazines concerning the current Russian HRM, there was a limited number of papers written by foreign researchers; for example, Bostwick (1998), Longenecker, Kotchetov (1997), Longenecker, Simonetti and

Kotchetov (1999), Sarkisov and Knuti (2001).

In the absence of previous research on HRM in Japanese subsidiary firms operating in Russia and with the lack of research about contemporary HRM characteristics in Russian companies, the present paper makes a contribution to international management research. This paper is a result of case studies conducted in both plants in August- September 2000 and in July 2001. Case studies consisted of on-site observations and interviews with staff of the plants. After the field study, to get additional information many telephone calls were made to managerial staff of the plants. Much information was also obtained from local newspapers and local TV broadcasts.

## I. Organization of Work in Plant J and Plant R

### 1. Layout

*Plant J* is a Japanese-Russian joint venture established in May 1991. The State Committee of Property of the Irkutsk region administration provides 51% of the joint capital, and the remaining 49% is Japanese capital provided by a big trading Company A and a medium-size timber-processing Company B. Specialists from the latter company installed machinery in Plant J and transferred technology; they exercise technical control and conduct quality assurance check.

The fenced area of Plant J (approximately 80,000 square meters) includes a three-story General Office, the Operations Area, a manufactured goods store, and a lumberyard. The area is extremely clean as in most enterprises in Japan; there are no discarded logs or old and rusty machinery. The Japanese

“5S” system<sup>1</sup> is maintained.

On the third floor of the General Office building is an enclosed Directors’ Office, an enclosed office of the Accounting section, and a Big Room. As in a Japanese company, the management staff works in the big room. On the second floor of the General Office building are a cafeteria, shower rooms, toilets and lockers. Both Japanese and Russian employees use these facilities. These facilities are common for administration staff and workers; there is no segregation by status. All employees of Plant J, even directors and managers, wear a beige colored uniform for a sense of togetherness for all people working in Plant J.

The first floor of the General Office is the entrance into the Operations Area. The layout has been designed for mutual accessibility of workers and managerial staff and for ease of communication between them. The Operations Area (sawmill) is in one building. In the middle of the workshop there is a computer control-room, which is in a raised area. This location allows the Russian Production Director and the Japanese Production Director to observe, control and respond to any problem in the sawmill process.

*Plant R* covers a bigger area, about 600m by 800m. All shops are in separate buildings connected by railway. The buildings and other production capacities look old and have some rusty parts. There are discarded logs and old, no longer needed, machinery in some places.

The General Office administrative staff works in separate, enclosed offices. Shower rooms, lockers and a cafeteria are in a separate building. The lunch break is 12:00 – 13:00 for workers and 13:00 – 14:00 for administrative

staff.

The layouts of the two plants are different in the following points:

1. Plant J occupies much less area than Plant R, where the production process is divided into many shops placed in separate buildings. Everything in Plant J is compact and accessible.
2. The area of Plant J is much cleaner, no discarded logs or old machinery as in Plant R.
3. In both plants facilities such as cafeteria, shower rooms are common for administrative staff and workers; there is no segregation by status. However, the layout of Plant J takes into account the close interaction between management staff and workers. In Plant R the administration is working in an isolated building to prevent noise; there is no such accessibility of the administrative staff for workers as in Plant J.

## 2. Production

*Plant J* buys Common Pine<sup>2</sup> (*Pinus silvestris*) logs of the best quality called “export usage”<sup>3</sup>. The price offered by the plant for one cubic meter averages US\$52 or 1508 rubles. At Plant J the logs of pine are sawed into wood boards<sup>4</sup> of 10, 20, 30, 40 mm. thickness, the width and the length depend on an order. The boards are dried, treated with antiseptic preserving them from decay, and packed in polyethylene. The boards are exported to Japan. The productivity is very high (Tab. 1), Plant J saws 240,000 cubic meters of logs annually. To use production capacity more effectively, there are two shifts in Plant J. The machinery is new, made in Japan, Canada, and Finland. The production process is completely mechanized.

Only part of the warehouse work and the quality sorting of manufactured boards are manual.

Computers are used for selecting bucking points along the trunk, which allows maximum use of a log. The technology allows the use of 50% of a log; this is a record level of yield for Russian timber-processing plants. The equipment allows boards to meet the Japanese quality standards for sawn timber because boards can be milled to within 0.5 mm of thickness and width for the whole length of a board.

According to the Japanese Production Director, the Japanese TQC (Total Quality Control) system has been introduced in the plant. Quality control is the responsibility of the production workers; each worker checks the quality of the products in his place of work. In addition to workers, a Japanese quality assurance manager spot-checks quality by walking the Operations area and store. TQC system, using computers and modern machinery allow production with low level of defect rate (about 5%). Introduction of the concept of local employees ensuring the high quality needed to be competitive in the Japanese market was the most difficult problem for the Japanese expatriates. It took a lot of time to explain the essence of TQC and to make employees attentive to any small split in milled boards.

*Plant R* saws logs into boards (80% of general output), and also makes wood construction materials: beams, floor boards, and bracing of various sizes (20%). The thickness of boards is 16, 20, 30, or 40 mm; the width and length of boards depend on the order. Plant R

**Table 1. Data Concerning Production in Both Plants**

	Plant J (year 2000)	Plant R (year 2000)
Shifts	2	1
Volume of logs processed per year	240,000 m <sup>3</sup>	60,000 m <sup>3</sup>
Supply logs	"Export usage" grade at price 52\$ (1508R) per 1 m <sup>3</sup>	The first-rate and the second-rate of quality at price 500R per 1 m <sup>3</sup>
Products	100% boards	80% boards 20% wood construction materials
Volume of products per year	120,000 m <sup>3</sup>	25,000 m <sup>3</sup> (20,000 m <sup>3</sup> boards and 5,000 m <sup>3</sup> wood construction materials)
Sale market	Export: Japan	Domestic: Irkutsk Region
Maximum deviation from nominal size of milled boards	Meets the Japanese quality standard, mm	Meets the Japanese quality standard, mm
By length	+ 0.5	+ 50, - 25
By thickness		
up to 32 mm	+ 0.5	+ 1.0
32 to 100 mm	+ 0.5	+ 2.0
more 100 mm	+ 0.5	+ 3.0
By width		
up to 100 mm	+ 0.5	+ 2.0
more 100 mm	+ 0.5	+ 3.0
Employee number	396 people	380 people
Processing of logs per one employee annually	606.06 m <sup>3</sup>	157.89 m <sup>3</sup>

Source: Data are from Plant J and Plant R

buys first-rate and second-rate Common Pine (*Pinus silvestris*) logs with average price of 500 rubles for one cubic meter; the plant cannot afford to pay more.

The production process in Plant R is only half mechanized; that means that some machinery requires the continuous participation of a worker; e.g., timber-processing machines that require hand feeding. There is a lack of capital for new machinery. The machinery of Plant R was made in the Soviet Union and has not changed from the Soviet period. Old

equipment causes low productivity. The department of Quality Inspection checks quality after the products have made. Defect rate of milled boards is about 15-20%, such boards are subjected to further processing for producing boards of smaller size, beams, or are used as firewood. All goods produced in Plant R meet the requirements of the Russian quality standards for sawn timber. However, the requirements of the Russian standards for sawn timber do not meet the high quality oriented international market. For example, maximum

deviation from nominal size of sawn boards according to the Russian quality standard is much larger than that according to the Japanese quality standard (Tab. 1). The equipment of Plant R does not allow the production of goods of as precise a size as required by Japan. Therefore, all manufactured products of the plant go to the domestic market; none are exported.

Generally, it might be concluded that the production management of Plant J is organized much better than in Plant R. The quality of products is better owing to the fact that the plant can afford to buy logs of the best quality in the region. A second reason is that Plant J is much better equipped and has the world's best machinery that allows sawing precision to within 0.5 mm. The third reason is that the boards are treated with antiseptic and packed in polyethylene. The fourth reason is that TQC system is implemented. All these factors allow the plant to make goods meeting the high quality standards. Not only production management but also HRM is different in both plants. The HRM components, that are most differ from the Russian ones and are most innovative with respect to Russian enterprises, are examined below.

## II. HRM in Plant J and Plant R

### 1. Job Classification

The total number of employees in *Plant J* is 396 (year 2000). The average age of employees is 38 years. Plant J uses its own job classification:

*Group A* – main workers

A1 – workers of the shop

A2 – warehouse workers

A3 – workers of garage

*Group B* – other workers (guards, workers in cafeteria)

*Group C* – white collar employees

*Direction:* directors and supervisors.

There is no job description with professional requirements; main work tasks are determined in an employment contract. Job classification is simpler compared with other Russian plants: there are not so many job classifications and ranks. Only workers have ranks – eight ranks. To increase rank a worker has to pass an accreditation.

Because Plant J is a joint venture, both Russians and Japanese are in top management positions. The General Director is Russian. The Japanese Production Director acts as second-in-command. The Japanese Finance Director manages the sales of manufactured goods to Japan. The Japanese Finance and Production directors represent the two Japanese companies – the participants in the joint venture.

Workers are organized in teams per 10–15 people, divided according to the groups of machinery. Teams have no planned work volume. The production process is completely mechanized. Thus, work quotas for teams are not called for; workers need not increase quantity, but must skillfully operate machinery and ensure quality. Team members use cooperation in labor; e.g., mutual aid between workers or the combining of work by one worker to replace an absent teammate. This is promoted by flexible classification system.

*Plant R* during the planned economy had to follow the orders worked out centrally concerning professional structure, average rank of workers and number of employees. Narrow

inflexible classification was related to compressed narrow wage structures in order to keep the employees' compensation within the limits of the wage fund.

After the adoption of the law of the Russian Federation of 1 January 1991 "Concerning enterprises and business activity", enterprises have received the right to determine the professional structure by themselves. However, many enterprises still use the same system as under the Soviet economy, because there is not yet enough information about new systems and HRM specialists have no experience in choosing the optimum model (Adamchuk 2000:106). Plant R uses the united rank-qualification system<sup>5</sup>. Employees are divided into three groups:

*Workers* – main and supplementary

*Specialists* – those who graduated from a higher educational institution and specialized in a particular subject. In addition, the clerical staff is included in the group; however, they did not need higher education

*Management staff* – those who manage the plant or its subdivisions.

In each group there are numerous job titles. Each employee has a job description, rank and basic wage rate. Job descriptions identify tasks duties and responsibilities of an employee and contain job specification, where the knowledge, skills, and abilities, required level of professional education are listed. According to the united rank-qualification system "workers may have a rank from one to eight; managers -- a rank from

three to eighteen; specialists – a rank from four to thirteen" (*Rank-Quaification Reference Book* 2000:6). For example, the Director in Plant R has a rank of fifteen. For each rank the appropriate coefficient for payment is determined (Tab. 2). To calculate the pay level for a job, the wage of the first rank is multiplied by the coefficient of the appropriate rank.

The total number of employees is 380 people. The average age of employees is 48 years. According to the specialist of HR department, "Many employees are of pensioner or near-pensioner age. Young people go to work in new private companies where salaries are higher".

Workers in Plant R are united in teams<sup>6</sup> per 10-13 people. Each team has a planned work volume. Team members cooperate in doing the work tasks; e.g., mutual aid between workers or the combining of work by one worker to replace an absent teammate.

Analyzing the difference between two plants, the following explanation can be given. No rigid job classification in Plant J is typical for Japanese companies.

According to Abo (1994:28), efficient flexible production systems in Japanese companies were achieved by focusing on the human elements and by developing a supportive managerial system. Kawamura (1994:37) asserts that the flexible, not strictly determined, job classification with a small number of job classes and job tasks makes possible to assign a job not to an

**Table 2. Rank and Appropriate Coefficient for Payment.**

Rank	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Coefficient	1.00	1.36	1.59	1.73	1.82	2.00	2.27	2.54	2.91	3.27	3.68	4.18	4.73	5.32	6.00	6.68	7.41	8.23

Source: Data are from Plant R

individual worker, but to a work team. Kawamura compares this system with American one, which consists from numerous and finely demarcated job classes. Usually, in American plants, each employee accomplishes and is responsible for clearly determined in the contract work tasks. This makes it difficult to rotate workers and to promote the ability of workers to determine the causes of problems on the shop floor.

The one of the goals of introducing job qualification in any organization is to determine direct compensation. In Japan, the flexible relationship between jobs means that the wage does not closely correspond to job, but depends on length of service and performance appraisal of an employee (Person-centered payment).

“In the traditional American system, different wages correspond to each of the different detailed job classes” (Kawamura 1994:41). This system is closely related to determination of the wage levels for each profession and qualification (Job-centered payment -- depends on employee’s position, rank, efficiency).

Concerning Russia, it might be said that during the Soviet period, there were rigid job classification and narrow wage structures in enterprises. Introducing a common rank-qualification system increased the number of ranks and wage levels but the rank-qualification structure still seems narrow. With the establishment of a labor market, enterprises have to retain their employees by offering them better advancement opportunities and bigger compensation. The main point of transformation of job classification is to change the previous rigid job classes and narrow wage differentials

in order to increase incentives, in particular for skilled workers.

In the future, with modernization and automation of production processes, and with the elimination of team quotas and individual quotas in Plant R, the introducing of flexible classification as in Plant J would enforce rotation between shop floor workers or the combining of work by one worker to replace an absent teammate in order to quickly respond to production needs.

## 2. Training

The training in *Plant J* is mostly inside. According to the specialist of the HR department, in 2000, 22 employees were trained. *Workers*. All newly hired workers must complete 3-month On the Job Training (OJT) - the participant, attached to a coach, studies work operations, treatment of machines and tools. There is neither any methodological learning literature, nor job descriptions. The employees study only machinery manuals. Previous rank and experience in other timber-processing enterprises are not taken into account. At Plant J workers must train again and in order to move up a grade they must pass an exam. The managers explain these requirements by saying that Plant J is equipped with advanced machinery, which requires special skills. The employees value their employment because they are trained to work with the world’s best machinery.

At the end of 1993 workers (operators, technicians) trained in Japan. The participants took four months of OJT, learning safety measures, operation of machinery, quality control, “5S” elements, etc. In 1994 four groups



of twenty participants, at the beginning of 1995 four groups of ten participants, were trained in Japan, in a plant of Company B. The duration of this training was one month in each case. The most attention is paid to sharpening and positioning of the saw frame. This job is the most skillful. From 1996, annually, four groups of eight newly hired workers and, in addition, employees who have an excellent performance and want to increase their rank have been trained in Japan for one week. The number of employees and the duration of training have decreased because the employees who have been working in Plant J long time can teach and pass on their experience to newly hired employees. In addition, Japanese expatriates work in the plant and can explain an asked point.

Training in TQC is given great attention in the plant. First, the Japanese quality assurance manager explains the essence of TQC using practical examples – boards with different kinds of defects. In addition, he explains the main principles of TQC: i) the control should be done by each worker of his/her own accord; ii) the worker must know the theoretical basis of the control; iii) the worker should not only notice the defect, but should try to analyze the reason for the defect: defects in the log, troubles in the machinery, a mistake of personnel in the line or other reason. Second, the mentor and fellow workers help the participant to develop skills needed for quality control. The introducing of TQC has succeeded. According to an interview with an operator, “We produce goods for the Japanese market, where standards of quality are very high. If we did not provide high quality, the goods could not be

exported.”

Much attention is paid to learning the elements of “5S”. There is a rule in the plant that one may leave the work place only after putting it in order; an admonition is given for violation of the rule. According to interviews with employees, they understand that cleanliness, workplace organization and discipline are all integral parts of production organization and the producing of high quality goods. There is an order in the plant that on Saturdays employees must come to the plant for cleaning and for a diagnostic check of the machinery. The shifts are changed; e.g., the first shift employees come to the plant on the first and third Saturdays, the second shift – on the second and fourth Saturdays. Employees in the plant are trained to do routine examination of the machinery; i.e., to reveal anomalies in the work of machinery, wear and tear of machinery parts, etc.

*Managerial staff and specialists.* All newly hired specialists, despite of education level, must take OJT under guidance of a mentor in the workshops in order to understand the production process.

In 1993 the top managers were in Japan four times. They were explained the Japanese management principles, organizing of work at all levels, the advanced timber-processing technology, TQC, 5S elements, etc. Annually, managers and financial staff are sent to Japan in order to learn financial reporting to the Headquarters, invoicing, accounts receivable collection, inventory control, etc.

There is no other special training for team leaders and middle management staff. There is no training of interpersonal relationships for

work in teams, no group problem solving, unlike, for example, in Japanese auto plants in America. There is no introducing of “quality circle” activities for suggesting solutions to problems concerning productivity and quality.

*Plant R*, during the Soviet period, had to follow centrally planned guidelines concerning training of employees (the term “increasing of qualifications” was commonly used) and norms concerning the number of employees for both OJT and Off-Site training.

Transition to a market economy caused the following transformations:

- ceasing of the centrally planned system with coordinating centers for training of employees; nowadays, Plant R decides by itself how many employees will be trained and where;
- transition of educational facilities from providing free education to requiring payment.

Both these points negatively influenced training by decreasing the number of trained employees. The total number of employees trained in 2000 was 21 people (5.5% among 380 employees), comparing to 204 people (49.7%) who were trained in 1990 among the total number of 410 employees.

*Workers.* During the Soviet period and nowadays Plant R conduct OJT for newly hired workers. Newly hired young workers, who have graduated from the technical trade schools in a profession related to the timber-processing industry, have 3-month probation period. Usually they have a rank received in the school. For such workers a mentor (a highly skilled worker or a team leader or a foreman) is assigned for the practical training and to check

if the worker's abilities meet his/her rank. If a worker shows satisfactory performance s/he starts work with the assigned rank. In cases, when a person has no professional education, only an eight-year school or secondary school education, s/he becomes “an apprentice” without a probation period. The apprentice is assigned to a coach who explains machinery operation, technology, the production process, the safety measures, etc. Usually the apprenticeship lasts 5-6 months. After this period there is an exam for giving a rank.

In the Soviet period, for workers who wanted to increase qualifications and rank, there were evening classes in the Forestry Technical School in Irkutsk; however, the school was changed into a Business College in 1992. Compared to the Soviet period, the Off-Site training of workers has almost stopped, because of i) the closure of Communist labor schools, schools for diffusing best practices, other such facilities; ii) not enough financial resources in Plant R. Nowadays, workers study by themselves and under the guidance of a more qualified worker – mentor. In the plant there is much literature about job descriptions, operation methodology, theoretical questions for the exam for increasing rank, machinery manuals, etc.

TQC is not introduced in Plant R, the quality of produced goods is checked by the department of Quality Inspection. Therefore, workers are not paid so much attention to quality of products during their training, that is, undoubtedly, decreases the attitude of workers to quality ensuring.

*Managerial staff and specialists.* In the Soviet period training of managers and specialists was

done for various purposes: it might be a periodical training, or training for increasing rank or for promotion. Newly hired specialists took OJT; i.e., were attached to a mentor – an immediate supervisor – for 2-4 month learning in the work place. However, in most cases the training was done outside the plant. The main educational facilities for training were the courses for increasing qualifications offered by the Ministry of Woodworking Industries in Moscow, the Scientific-methodological Center of Labor in Moscow, and the Siberian Technology Institute in Krasnoyarsk.

At present, these facilities continue their activities. The training courses have fees. The courses given by the Ministry of Woodworking Industries also accept participants for training but in smaller numbers.

Comparing training in both plants the following can be concluded. The difference between two plants is that the training of employees in Plant R is mostly outside; outside education and training are recognized as job qualifications. Moreover, all methodological literature is strictly based on the job description. In Plant J rank received outside is not recognized as a job qualification. The training is done only inside.

The following aspects might be useful for Plant R. The first is that OJT in Plant J more closely meets the requirements of the plant: the employees study what they will really use at work, not just a formal amount of knowledge. The second is that the focus of training in Plant J is not only to explain the methods of work but also to convince the employees of the constant necessity of using these methods. Third, the introducing and thorough training of TQC and

elements of “5S” of Plant J can be useful for Plant R.

However, in both plants there are shortcomings of training evaluation. In both plants a simple quantitative index is used concerning the training: the number of trained employees. No evaluation of the training is done. There is no evaluation of the economic effect, no evaluation of the level of transfer (the employee's consistent use the studied knowledge); and no evaluation of the employee's perception of the training (was the employee satisfied with the training).

### 3. Performance Appraisal

In *Plant J*, every month, the monthly personnel evaluation, the “coefficient of quality of work”, CQW, of each employee is determined by his/her supervisor and then approved by a higher supervisor. For example, in the case of workers, CQW is determined by the team leader and shift manager and then approved by both the Russian and Japanese Production Directors. The criteria determining CQW are personal work results, quality of work, attitude to work, keeping the work place clean, discipline, human relations at work, striving for development. CQW is a strong motivator for employees to accomplish work tasks because it greatly influences the payment.

In *Plant R* there is monthly performance appraisal for workers. Every month the team leader and the foreman determine and, then, the shop manager approves, a “coefficient of work participation”, CWP, for each worker - a quantitative index estimating worker's contribution to the fulfillment of the team's work quota. The main criteria for evaluation are

quantitative contribution to timely fulfillment of the work quota by the team, non-existence of absence, tardiness, disciplinary penalties. CWP is closely related to piece-rate pay for team workers and allows precise determination of the compensation amount. The system of calculating of CWP has not changed from the Soviet period, when the goal of an enterprise was to fulfill a planned work quota. CWP greatly influences payment, therefore, it effectively makes workers fulfill plans and follow discipline.

Comparing performance appraisal in both plants the following might be said. In Plant R there is monthly performance evaluation only of workers; the monthly performance of managers and specialists is not evaluated. That, under present market economy conditions, when the activity of an enterprise depends on management process, is undoubtedly a shortcoming of HRM in Plant R.

There is also a difference in the criteria of appraisal of both plants. In Plant R, the main criteria for evaluation are quantitative contribution to timely fulfillment of work quota by team, lack of absence or tardiness, and following rules. Speaking generally, quantity of output, timeliness of output, presence at work and behavior affect evaluation; i.e., behavior-based and result-based information is the basis for appraisal.

In Plant J the criteria for evaluation not only focus on following rules (it is an inalienable, natural part of work), but also on conscientious work, controlling the quality of products because that is the responsibility of workers, keeping the work place clean, cooperativeness; i.e., trait-based and result-based information. It

might be said that criteria in Plant J are at a higher level.

#### 4. Compensation

*Plant J* uses the compensation system typical of Japanese companies where the main criteria are length of service in the company and performance evaluation. This payment system (monthly salary) is for all employees of the plant. Work is mechanized and automated, workers work at the conveyer; therefore, monthly salary and actually monthly worked time determine the payment.

The basic pay contributes, on average, 40% of an employee's compensation; the other 60% consists of the increment for years of service and a monthly bonus. There are no bonuses paid either annually or twice a year. Basic pay is determined at the time of hiring but increases slightly with the cost of living adjustments based on the inflation rate. Basic pay of workers increases with increase in rank.

The monthly bonus depends on the work performance results of the whole plant. Performance appraisal strongly influences the bonus and the increment for years of service. The increment for years of service is an automatic pay increase based on a certain length of tenure in the plant. Plant J, using the increment for years of service, motivates employees to work a long time in the plant. This, consequently, decreases the turnover rate and leads to reducing costs for recruitment and training. In addition, seniority pay increases are given on the assumption that as experience increases, proficiency and performance also increase, so pay raises are appropriate. If proficiency and performance do not increase,

they influence performance evaluation and seniority pay adjustment is reduced.

The compensation system in *Plant R* has not changed from the Soviet period. There are two types of pay in the plant. Management staff, specialists, clerical staff and some supplementary workers receive a monthly salary. Basic pay of salary depends on profession and rank. This way of payment motivates employees to increase their qualification and rank and to work without absence; however, there is no connection between work and its qualitative and quantitative results.

Main and engaged in maintenance and warehousing supplementary workers are united in teams and receive team piece-rate pay. This pay was widespread during the planned economy because it “ensured the fulfillment of production plan even under a disordered pace of work; e.g., delay in delivery of supplies or break down of machinery” (Slezinger 2000:124).

Piece-rate wage depends on the profession and rank of a worker, the results in implementing a planned volume, and the monthly appraisal (CWP). This way of payment motivates employees to increase their qualification and rank and to work without absence, because basic pay is computed by multiplying hourly wage by actually worked hours.

In addition, employees receive a monthly bonus that depends on the plant performance and is distributed between employees proportionally to basic pay; e.g., depends on rank.

Comparing compensation methods in both plants, it can be concluded that the compensation

is different both in the quantity (In 2000 the average monthly salary in Plant J was 6500 rubles, in Plant R -- 2700 rubles) and in the method of determination. First, workers in Plant J receive salaries that depend on the actual monthly worked time, which is easily calculated because all work is mechanized and automated. Both the mechanization and the related compensation method of Plant J are more progressive. Second, the great influence of monthly appraisal on salaries of all employees in Plant J, might be relevant in Plant R, where both salary and bonuses of specialists and managers depend on their profession and rank; thus there is no connection between work and its qualitative and quantitative results. Undoubtedly, for the better motivation of employees an urgent transformation is to make bonuses related to performance accomplishments.

In addition, the use by Plant J of increments for years of service, the policy of long-term employment for industrious employees with good performance and high compensation motivate employees to work a long time in the plant. Introducing the same increments in Plant R might contribute to the retention of employees.

As it was mentioned in *Job classification*, the main criterion in Japanese enterprises is performance evaluation as well as length of service. The main criterion for pay in Russian enterprises is the detailed job classification system and rank. Dore (1973:74), Kusuda (1995:95), Kawamura (1994:41) divide Japanese and Western pay systems on the base of different criteria and determine them as “Person-centered” and as “Job-centered” accordingly. Considering the direct compensation

structure, it may be concluded that Russian pay is similar to the Western system.

### 5. Discipline

According to the Labor Rules of *Plant J* all employees must come to the work place at least five minutes before the beginning of a shift. The time of leaving the building is strictly determined: ten minutes after the end of work. Employees may leave for home only after putting the work place and equipment in order, for not implementing this rule there is punishment (admonition – for the first occasion, reprimand – for the second, etc.). Lateness is not allowed. For the first coming to the work place less than five minutes before the beginning of a shift an admonition is used, for the second a reprimand, for the third a strict reprimand, for the fourth – dismissal. For one-day absence, including absence of more than three hours, dismissal is used. According to interviews with workers, the administration really strictly controls following the labor rules of the plant, and implements punishment for violations. The absenteeism rate is 3%.

In *Plant R* there is no rule for employees to come to the workplace before the beginning of workday and to leave the building ten minutes after the end of work as in *Plant J*. Break time is included in the work time. Lateness is not allowed; however, according to the specialist of the HR department, the administration does not punish employees for lateness strictly. The reason is the high turnover of employees (17%); the administration cannot use strong punishment, such as dismissal, for lateness. In spite of the fact that for one-day absence, dismissal must be implemented according to the

Labor Rules of *Plant R*, actually dismissal is used only for unauthorized long absence of some day's duration. The absenteeism rate is higher than in *Plant J*, 12%.

The same kinds of punishments are used in both plants: admonition, disciplinary reprimand, strict disciplinary reprimand, or dismissal (These are related to the requirements of the Labor Code). However, the biggest difference between two plants is that in *Plant J* the kind of punishment that can be used for a violation is specified. It makes the implementation of punishment more objective and decreases abuse from the administration.

In *Plant R*, the kind of punishment is determined by the management personnel in each case of violation, considering the seriousness of the violation and the previous work and behavior of the employee.

In comparing the discipline between the plants, two differences are clear. First, the labor rules and control in following these rules are much more strict in *Plant J*. As a result, the discipline is better and the absenteeism rate is lower. Undoubtedly, to introduce such rules in *Plant R* at present, when salaries are not big and turnover is high, is difficult; but in the future, with the production modernization and the offering of higher compensation, the strengthening of discipline will be an indispensable condition for the successful operation of the plant. The second difference is found in the detailed specification of the type of punishment for a particular violation. This is new for Russian enterprises because enterprises always follow the Labor Code where it states that the administration decides by itself the kind of punishment. The specification of *Plant J*

can be a model for Russian enterprises to make the implementation of punishment more objective.

### Conclusion

Plant J, using modern equipment with high productivity, processes four times as many logs as Plant R with almost the same number of employees. Moreover, Plant J buys high quality logs, keeps very high sawing precision, treats boards with antiseptic, and does plastic packing of goods. The end result is that Plant J processes boards meeting the high quality of world standards; this allows them to be exported to Japan. Production management and closely related to it HRM support the production. To use production capacity more effectively, there are two shifts in Plant J; employees are trained and motivated to constantly use TQC, maintain the elements of "5S" system, do the routine examination of the machinery; monthly performance appraisal is in effect for all employees; labor rules are more strictly followed, etc. Undoubtedly, despite modern equipment and the use of high quality logs, without the above-mentioned aspects of HRM, there would not be effective production.

Production management as well as HRM of Plant R has not changed greatly from the Soviet

period. However, the predictable and controlled environment of the Soviet period has changed to a competitive market-driven environment. The urgent task for an enterprise is to change its management in order to survive in this environment. Plant R managers intend to increase efficiency, to improve quality, to invest into new technology and equipment, to increase compensation in order to retain the best workers, and to improve their management including HRM. Without this transformation Plant R is condemned to become bankrupt in new market conditions. Comparing data of both plants (Tab. 3) concerning HR effectiveness<sup>7</sup> allows us to conclude that HRM of Plant J is more effective than that of Plant R.

Both production management and HRM of Plant J are more suited to the present market conditions than that of Plant R. The management practices of Plant J, including HRM, have been brought from Japan where a market economy has existed for a long time. Therefore, Plant J's management practices, which are efficient, should become a model for Plant R as well as other Russian timber-processing enterprises facing market economy challenges.

**Table 3. Comparison of Statistical Data Concerning HRM in Plant J and Plant R (year 2000)**

Data	Plant J	Plant R
Employee average age	38 years	48 years
Average wage	6500R	2700 R
Turnover rate	6%	17%
Absence rate	3%	12%
The number of trained employees	22 people (5.5% of all employees)	21 people (5.5% of all employees)

Source: Data are from Plant J and Plant R

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- 1 Translated into English the "5S" are housekeeping, workplace organization, cleanup, maintaining cleanliness, and discipline. Elaborating further, housekeeping (*seiri*) means having only what is immediately needed on the shop floor. Organization (*seiton*) means a place for everything in its place. Clean-up (*souji*) covers immediate clean up around the work area. Maintaining cleanliness (*seiketu*) means to keep everything clean and in a constant state of readiness. Discipline (*shituke*) means that all employees understand and obey the rules of the plant.
  - 2 Pine is in demand in Japan. Pine from the Irkutsk region is valued for its even-textured surface, firmness and strength. Undamaged slow-growing trees yield fine-textured wood with narrow rings. Knots are small and widely dispersed because the narrow crowns of high-latitude boreal conifers are exaggerated under the stress of harsh climatic conditions. These trees have narrow sapwood, so logs generally remain straight even under prolonged storage or delays between felling and sawing. In Japan, imports and end-uses of pine from Siberia compete with timber from Southeast Asia. It is used not only in carving and pattern making but also for high-quality construction material.
  - 3 According to the Russian State Quality Standard for coniferous species logs, logs are divided into four grades depending on the quality. The best quality grade is named "export usage"; this is the lowest part of a tree trunk. Usually "export usage" grade part takes up about 30% of a log. After the "export usage" grade, the first-rate, second-rate and third-rate quality grades follow. Plant J buys pine logs of "export usage". The price (August 2001) offered by the plant for one cubic meter US\$45 (1305 rubles) for logs with diameter 20-32 mm and \$59 (1711 rubles) for logs with diameter more than 32 mm. Plant R buys logs of the first-rate and the second-rate; i.e., logs with diameter from 14 mm, cut from the upper part of a trunk. Their average price is 500 rubles for one cubic meter.
  - 4 Plant J makes only wood boards, no other wood materials. Plant J does not export raw wood because of low margin of such products. In addition, The Administration of the Irkutsk Region intends to reduce the export of raw wood and increase export of value-added processed timber, thus strengthening the local economy and increasing export earnings. Therefore, the negotiations between the Administration and foreign partners are almost exclusively about the establishment of timber processing enterprises, even small mills.
  - 5 According to decree No.785 of the Russian Federation of 14 October 1992, "Concerning measures for improving payment of civil servants", united 18-rank classification system and pay structure were determined for civil servants. On the basis of decree No.785, the Ministry of Labor of the Russian Federation issued decree No.32 of 6 June 1996 "Concerning payment levels and common rank-qualification system for all employees". The united wage scale of decree No.785 was made *obligatory* for civil servants. The united scale of wage rates and job descriptions of decree No.32 was *recommended* for organizations. Although each organization may determine its own number of ranks and pay coefficients, the organization must meet the following conditions: the payment for the first rank can not be lower than the minimum wage as set by a decree of the government of the Russian Federation.
  - 6 Teamworking of workers has been practiced in almost all Russian plants and factories. A team may consist of workers of the same profession (e.g. assembler workers) or different professions depending on the kind of work. However, uniting into teams is only possible under the following conditions: the result of work can be estimated, specialization and co-operation between workers must be organized so that the contribution of each worker can be estimated. Combining of professions by a worker or combining performance of duties by a worker allows even distribution of work between workers and rational use of work time.
  - 7 According to Mathis R. and Jackson J. (*Human Resource Management*. Library of Congress Cataloging-in-Publication Data, 2000:97), the main criteria of HR effectiveness are turnover rate, absence rate, compensation, etc.

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## A Comparative Analysis of Human Resource Management in Two Timber-Processing Enterprises: a Russian Enterprise and a Japanese-Russian Joint Venture

ERMACHKOVA Svetlana (FANUC Ltd.)

The performance of Japanese subsidiaries in Russia is a research theme that has not been studied well. However, Russia now facing market economy challenges, urgently needs Japanese financial investment, the creation of jobs through the establishment of Japanese subsidiaries, and the transfer of the productive Japanese management and production systems.

This paper examines the performance of a timber-processing Japanese subsidiary (Plant J) in the Irkutsk Region, including the plant's organization of work, production output results and HRM. The investigation of HRM is based on the components (such as Job Classification, Training, etc.) that are most different from the Russian ones and thus innovative for Russian

enterprises. In addition, these aspects of HRM are compared with those in a domestic timber-processing plant, which has the almost the same number of employees.

The results summarized in the paper indicate that both the production management (the modern technology and equipment allowing high productivity and producing high quality goods) and the human resources management of Plant J (significant compensation, thorough training, the introduction of TQC, etc.) are more progressive and more suited to the present conditions of a market economy than those of the domestic enterprise. The management of Plant J should become a model for domestic enterprises.