

**DIXIÈME RENCONTRE INTERNATIONALE DU GERPISA  
TENTH GERPISA INTERNATIONAL COLLOQUIUM**

La coordination des compétences et des connaissances dans l'industrie automobile  
Co-ordinating competencies and knowledge in the auto industry

*6-8 Juin 2002 (Palais du Luxembourg, 15, rue Vaugirard, 75006 Paris, France)*

**WORKING IN THE “MODULAR SYSTEM”: A PROFILE OF WORKERS IN THE  
NEW VW EXPERIENCE**

*José Ricardo RAMALHO and Marco Aurélio SANTANA*

*Federal University of Rio de Janeiro and  
University of Rio de Janeiro, Brazil.*

**INTRODUCTION**

Since the inauguration of the Volkswagen (VW) bus and truck complex in Resende (Brazil), in 1996, followed by the PSA - Peugeot Citroen complex in the neighboring town of Porto Real, in 2001, Southern Rio de Janeiro State has been promoted by entrepreneurs, trade unionists, politicians and administrators as a region endowed with the skills required for metal-mechanics production, despite its brief track-record in this industrial sector.

These enterprises required a new kind of worker, better educated and more skilled. Their demands reshaped both the labor market and working class profiles in this region: for the first time ever, Resende and Porto Real have built up a labor force for the automobile industry, paving the way for workers to participate in other types of social and political networks. The best example of this new process is the rapid expansion of worker organizations battling for higher wages and better working conditions.

The purpose of this paper is to present the findings of a recent survey of workers at the VW modular consortium, underpinning the first characterization of the main work-force at this new experimental complex and presented in two parts:

- As a background for the analysis, we present figures on direct investment volumes in the region and their consequences on local and state policies over the last five years, using quantitative data produced by national, regional and local research institutes, supported by interviews with regional policy-makers and information drawn from newspapers and other specialized publications.
- Next, we consider elements related to work conditions, the composition of local labor market and the aspects of training and schooling for plant workers, in addition to working class organizations and living conditions, all based on data collected through this special survey carried out 2001. We also stress worker assessments of their relationships with the companies (VW and the suppliers) and their representatives (trade union and factory committee).

## **THE AUTOMOBILE INDUSTRY IN RIO DE JANEIRO**

Located in Southeast Brazil, Rio de Janeiro was a leading contender for the fresh foreign investments that reshaped the automotive sector during the 1990s. These changes were prompted by multi-sector deregulation that allowed imported products to enter the country, in parallel to a regionalization strategy implemented by the industry itself worldwide. Together with many other parts of the country, Rio de Janeiro State strove to offer attractive conditions to the auto-assemblers and their suppliers, consolidating fresh investments.

The official announcement that the town of Resende had been selected as the site of the new Volkswagen manufacturing complex – particularly as this was an experimental plant – prompted much expectation over the effects that this would have on the economy of the town in general, and more particularly the labor market. For instance, the issue of jobs has been widely exploited and discussed since then at the political level, underpinned by the confirmation of the new PSA Peugeot Citroen plant in the neighboring town of Porto Real.

The negotiating process bringing these companies to Rio de Janeiro State was based on the incentives offered by the new “automotive regime”, introduced by the Federal Government in 1995 and triggering a new type of industrial policy for the region (cf. Ramalho & Santana, 2001).

A survey of the press over the past few years reveals an upbeat context with more investments being channeled to Southern Rio de Janeiro State. The arrival of the auto-assemblers and their suppliers extended the range of action of existing companies, introducing a new set of concepts to a region previously dominated by the overwhelming presence in nearby Volta Redonda of one of Brazil's leading steel mills – CSN (Companhia Siderúrgica Nacional). As

some businessmen noted, the shift from a steel belt to a hub with broader characteristics seems to have been perceived by companies that decided to reinvest or launch new businesses in this region.

Data on the investments announced and actually implemented over the past five years in Rio de Janeiro State – particularly Resende and Porto Real – clearly indicate the direct effects on the local context of the arrival of these auto-assemblers, although VW and PSA Peugeot Citroen work with different strategies. The companies in its modular consortium were not drawn to the region by VW as it felt that its proximity to the São Paulo industrial hub and the existence of the relatively modern highway running between Rio de Janeiro and São Paulo would handle the flow of parts and components required for its production activities. In contrast, PSA Peugeot Citroen has been building up a belt of suppliers around its plant at Porto Real (probably because this is the first plant set up by this auto-assembler in Brazil). A survey of the volumes and types of investments in these towns and neighboring areas indicates that other companies revised their plans in order to take advantage of the general conditions ushered in by the establishment of this automotive hub.

In general terms, the State industrial development agencies indicate that the Mid-Paraíba region (including Resende and Porto Real) absorbed US\$ 1 billion in private investments from 1995 through 2001, generating 9,200 direct jobs, behind only the State Capital itself: the City of Rio de Janeiro. (*Gazeta Mercantil*, Rio, April 9, 2001).

The Table below projects the results of a survey covering the group of companies already established or that have announced their investments over the past two years, providing some details on the proposals presented, the announced investment funding, the potential work posts and the type of output.

Table A. - Companies linked to the Automotive Chain – Investments

COMPANIES	Announced investments	Announced jobs	Type of Production
VW + companies in the Modular Consortium (Resende) – 1996.	US\$ 250 million	2000 (2000)	Trucks and Buses
PSA Peugeot Citroen (Porto Real) – 2001	US\$ 600 million	2500 (800)	Automobiles
PSA Peugeot Citroen (Porto Real) – 2002	US\$ 50 million	150	Engines
Faurecia (Porto Real) – 2001	US\$ 3 million	100	Automobile seats
Vallourec (Porto Real) – 2001	US\$ 6 million	70	Axle assembler
Copo Feher (Porto Real) – 2001	US\$ 7 million	10	Foam rubber
Gefco (Porto Real) – 2001	US\$ 3.5 million	70	Logistics
UTA (Porto Real) – 2001	US\$ 0.6 million	10	Wiring assembly
Eurostamp (Porto Real) – 2001	US\$ 20 million	200	Steel stamping plant
Manzoni Bouchot (Porto Real) – 2002	US\$ 9 million	50	Aluminum parts for clutch and gearbox
Galvasud (Porto Real) – 2000	US\$ 236 million	Not given	Galvanized steel for automobiles
Michelin (Itatiaia) – 2002	Not given	Not given	Automobile tires
Witzermann (Resende) -Not given	Not given	Not given	Flexible metal pipes
Regasbin (Quatis) - Not given	US\$ 2 million	Not given	Parts for machinery and automobiles
Tuti Transport (Resende) – Not given	US\$ 0.6 million	Not given	Bus and truck chassis for VW.
Abrasive products plant for heavy mechanics (Resende) - Not given	US\$ 0.5 million	Not given	Abrasives

Source: *Gazeta Mercantil* and *Diário do Vale* (2000, 2001).

An aspect that has not yet been analyzed to any great extent is the basic infrastructure. Established prior to the tax incentives policy, this may have been a decisive supplementary factor in selecting this region as the focus for fresh investments in the automotive sector. Although relatively secondary in the negotiating process, other factors favoring the town of Resende included its strategic location (between Rio de Janeiro and São Paulo, close to the Port of Sepetiba, etc), in addition to a series of other potential advantages arising from the implementation of infrastructure designed to buttress industrial growth that seems to have been one of the characteristics of successive municipal administrations, in parallel to efforts to attract new firms. Furthermore, even if not actually taken into account by the companies, other aspects certainly indicated high levels of education, housing, and government policies within the context of Rio de Janeiro State.

The Tables below show quite clearly the economic performance of this region, selected to house these new companies of the automotive chain.

Table B shows that the Mid-Paraíba region (including Resende and Porto Real) ranks first for *per capita* GDP, above even the Rio de Janeiro Metropolitan Region, and almost double the levels achieved by much of the rest of Rio de Janeiro State.

**Table B. - Per Capita GDP by Region Rio de Janeiro State – 1999**

Region	Amount (R\$)	Rating
Rio de Janeiro State	10,198	100.0
Metropolitan Region	10,397	102.0
Northwestern Rio de Janeiro State	4,380	43.0
Northern Rio de Janeiro State	5,176	50.8
Hill Region	6,579	64.5
Shoreline Lowlands	4,669	45.8
Mid-Paraíba	11,258	110.4
Center-South Rio de Janeiro State	5,205	51.0
Ilha Grande Bay	8,354	81.9

Source: *Boletim da Economia Fluminense*, Year II, No 5, CIDE – RJ  
(Rio de Janeiro Information & Data Center), 2001.

Table C best reflects the increase in the GDP for this region where the auto-assembly plants were set up, perhaps revealing the first specific indications of this upsurge in investment standards and levels.

**Table C. - GDP Development in Resende, Porto Real, Itatiaia and Quatis  
(Mid-Paraíba Region)**

Towns	1996	1997	1998	1999
Resende	1,030,644.78	1,065,243.83	1,331,450.41	1,563,165.77
Porto Real	-	84,914.95	118,558.74	203,736.78
Itatiaia	552,889.34	538,014.33	606,933.71	643,221.27
Quatis	41,580.69	42,431.93	36,731.91	42,791.76

Source: *CIDE-RJ (Rio de Janeiro Information & Data Center), 2001.*

Other elements confirm the comparative advantages of this region. Among the various attributes analyzed during the process that selected Resende and its surroundings to house these auto-assembly plants, education and skills were always been stressed, not only because this region ranks high in terms of schools, but also because it houses a Vocational Training Center run by the National Industrial Apprenticeship Service (SENAI - *Serviço Nacional de Aprendizagem Industrial*) that plays a dual role: training new workers and recruiting skilled labor. This guaranteed the two main automotive companies in this region a well-trained labor-force at low costs compared to the labor market in other places such as São Paulo, for instance, backed by a vocational training infrastructure that is already in operation.

Due to the characteristics of companies in the automotive center – meaning that they form part of an international production chain, the development of this new industrial hub has also required new types of institutional relationships, as these giant multinationals are constantly seeking innovative styles of management in order to keep up with the logistics of a highly competitive globalized economy. For instance, the trade unions – particularly the Metalworkers' Union – have established new partnerships and are specifically concerned with aspects of workers' lives other than matters related merely to the factory floor.

Furthermore, shifting institutional relationships have revealed initiatives that indicate a trend towards different types of association that may reflect a shift in economic and political governance standards at the local level.

For instance, the active presence of the trade union on the Municipal Employment Commission – which is a forum bringing together representatives of the municipal government

and its agencies with entrepreneurs from various economic sectors – reflects the development of these new links. However, aspects related to labor relations and the performance of institutions representing the workers may well be establishing a new benchmark for institutional discussions, as key factors shaping new types of organization and intervention in the local context, such as the expansion of trade union activities in Resende, for instance.

The arrival of the VW and PSA Peugeot Citroen auto-assemblers affected worker and trade union issues, offering the Resende Metalworkers' Trade Union many challenges. Union leaders have had to deal with the professionals employed by the multinational companies during the wage negotiation processes over the past few years, backed by ample experience in labor relationships and trained to extract the greatest possible benefit from the low wages in this region. In addition to not being accustomed to negotiating with companies in the auto-assembly sector, the Trade Union has always been supported politically through strong and long-standing links to the workers at the CSN (Companhia Siderúrgica Nacional) steel mill, which was State-run until recently. The arrival of the new plants at Resende and Porto Real introduced changes in regional trade unionism.

According to the words of its President in 1997, the Metalworkers' Union saw the arrival of VW in Resende as an opportunity opening up more jobs for local workers, pleased to welcome a “symbol enterprise” into its field of action (Abreu, Beynon & Ramalho, 2000).

However, its pleasure over the possibility of new jobs may have given a false impression that the trade union would be disarmed by the powers of persuasion of the company, mainly because it lacked the experience to function and negotiate in the auto-assembly sector. Although the trade union leaders have always been guided by the spirit of reconciliation, they soon became aware of the difficulties encountered by the trade union in dealing with the modular consortium – different companies with different management policies, although constituting a common project; this also reveals that the strategy of the consortium to some extent undermines the companies, faced with a possible radicalization.

An analysis of the period since VW established its plant in Resende shows that the Metalworkers' Union has proved an effective shield for worker interests through its experience of discussions with Volkswagen and its satellite suppliers, engaging in exhaustive discussions in order to obtain wage advantages and better working conditions, with a striking presence within the plant itself, as well as at meetings held at its gates. The peak of this performance is reflected in the first halt called in November 1997, and other subsequent demands that culminated in a week-long strike in August 1999 – the first time this ever occurred at the company.

## PROFILE OF VW METALWORKERS IN RESENDE

As shown in the previous section, the establishment of a company the size of VW in a town like Resende produced a wide variety of impacts. This friction spotlights one of them: building up a new labor-force that is unique in the history of the region.

Presented below are the data obtained through a survey carried out in-house at the company in September 2001<sup>1</sup>. The information gathered through questionnaires outlined the initial profile of the metalworkers employed by the modular consortium. This was an extremely interesting task, as it helped build up a data-base and analyses of the workers at these satellite suppliers right from the start, continuing throughout the production systems development process. This questionnaire also included items drawn from an international survey<sup>2</sup> that offered various possibilities for comparison.

The results are divided into three parts. One section covers the social and economic lives of the workers, while the second assesses the labor relations in the modular consortium. The third analyses the types of representative worker organizations both within the plant and elsewhere, which they themselves assess.

### Social and Economic Life

In terms of social and economic data, this survey provides ample information on the workers themselves and how they live, recruited by Volkswagen and the companies in the modular consortium to work on the factory floor.

Worker age data reflect a plant that is run largely by young people. Some 51% of the workers are 25 to 34 years old. Adding this percentage to those aged 20 to 24 years (19%) gives a base of some 70% of workers aged 20 to 34 years, confirming a characteristic of the recruiting and/or training processes for the first local workforce for this type of industry. It should also be stressed that the plant hired mainly male workers (97%), in keeping with a general characteristic of this sector.

This workforce consists of a significant number of workers born in Rio de Janeiro State (86%), with 60% of them born in Resende – the town where these companies are located.

---

<sup>1</sup> This process is backed by the Volta Redonda Metalworkers' Union (Resende Chapter), the Factory Committee for the modular consortium, and the VW Human Resources Department. It is based on a 10% sample of a universe of some 900 workers.

<sup>2</sup> Coordinated by Professor Paul Stewart (University of West of England – UK). Cf. Stewart et. al (2001).



Living conditions have always been an important aspect for measuring the livelihood of industrial workers in general. For the workers at Volkswagen and the companies in the modular consortium, the results are quite clear, reflecting corporate recruiting policies based on ideal worker profiles. The number of workers stating that they had already purchased their own homes (59%) shows that most employees already benefit from an essential factor in family income, as they do not incur any additional outlays for housing. Nevertheless, a good percentage of these workers must still cover this type of expenditure, as 25% of them stated that they paid rent, with a further 10% still paying off their own homes.

A possible explanation for these figures is related to the selection of Resende as the site for this plant. A systematic policy of investing government funding in new housing has been implemented over the past twenty years in this town, developing new districts – such as Cidade Alegria, for instance – that currently house most of the workers. This can also be explained because these projects consist largely of houses (91%), prevailing over other alternatives such as apartment blocks. A possible explanation for these figures is related to the existing conditions that led to the selection of Resende as the site for this plant.

The issue of wages was also a significant element in the process that selected this region. Either implicitly or explicitly, it lay at the heart of the discussions during the period when fresh investments were being brought in, as well as during the implementation of the plant. At that time, VW surveyed the area in order to adapt its wages to those of other companies in the industrial district. The wage range data confirmed its strategy and decision to establish its plant here, as the wage range of three to five minimum wages<sup>3</sup> grouped together a significant majority of the workers (65%). A further 18% were in the five to seven minimum wage range (see Table 1).

Comparing the local and national wage rates indicates that the wage range for the modular consortium is higher than that in Southern Rio de Janeiro State, taking all economic sectors under consideration. However, it confirms the claim that is constantly put forth by the Trade Union that this is lower than the wages received by Brazilian metalworkers in other areas. According to data issued by the Inter-Union Department of Statistics and Social and Economic Studies (DIEESE - *Departamento Intersindical de Estatísticas e Estudos Sócio-Econômicos*),<sup>4</sup> the average wage for Brazilian metalworkers hovers around 6.2 minimum wages. In the specific case of the automotive sector, this rises to 8.1 minimum wages. By region, the average in Rio de Janeiro is 5.7 minimum

---

<sup>3</sup> The minimum wage in Rio de Janeiro State is equivalent to US\$ 90. Consequently, this range hovers between US\$ 270 and US\$ 450.

<sup>4</sup> Survey carried out by the sub-section of the National Metalworkers' Confederation (CNM – *Confederação Nacional dos Metalúrgicos*) / Central Workers' Union (CUT – *Central Única dos Trabalhadores*).

wages for the metallurgical sector in general, rising to 9.3 minimum wages in the industrial belt (ABC Region) surrounding the City of São Paulo. It is also worthwhile stressing that the average wage of the workers at the Volkswagen Plant in Resende is still lower even compared to the average wage for metalworkers in Volta Redonda (8.5 minimum wages) who are represented by this same Trade Union.

For the items covering recreation activities, the three most popular options were television (56%), soccer (47%) and reading (44%). They reveal activities that are largely associated with homes and/or low costs. This possibly also indicates that there are few recreation options offered to the populace in Resende and other neighboring towns, in the wage range of the metalworkers at the plants. Furthermore, as shown below, these recreation options may be directly linked to the pace of work imposed on these workers.

Another interesting fact that also throws light on the company recruitment strategy is related to schooling (see Table 2). This confirms the idea disseminated during the VW implementation process that a better-educated labor-force would be required. The data shows that 37% of the workers have completed junior high school, and 2% have high school diplomas. However, it is surprising that 27% have not yet completed high school, 15% have nearly completed junior high school, and 8% have not even completed junior high school. On the other hand, a significant proportion of the employees (44%) are still studying.

Still on the issue of education, the data indicated 82% of the employees have taken a vocational training course (see Table 3). On this aspect, the presence of the National Industrial Apprenticeship Service (SENAI) is noteworthy. In this area, 74% of the courses are taken at this Institution, with 12% at technical schools. This indicates the decisive importance for this region of these vocational training centers that have long been building up the skills of workers all over Brazil. The assessment of these courses is favorable: 48% rate them as good, while 43% rate them as excellent.

With regard to the presence of family members working at the company, the replies indicated that a reasonably significant number of workers (30%) stated that they had relatives working at the plant. A further 16% declared that they had obtained their jobs on the recommendation of family members. If this latter percentage is increased by the 38% who were employed at the recommendation of a friend, this reaches a high level (54%) compared to the 34% who indicated that they had obtained their jobs through a selection process. This is an interesting piece of information to analyze in parallel to the business modernization discourse that has exhaustively urged the exclusive importance of selective elements (qualifications and skills)

that are apparently beyond this type of link. Here, these two possibilities clearly function in parallel.

### **Assessing Labor Relations**

The set of data related to the working conditions reveal an interesting situation that explains the labor relations established by Volkswagen and the companies in the modular consortium with their workers and the consequences on their daily lives.

The relationships between the companies and their employees were rated as positive in general: 45% ranked them as good and 35% as excellent; only 1% opted for poor. Similarly, some 65% of the workers rated the working conditions as good and 19% as excellent. These figures show that the arrival of VW in the region established a standard of labor relations that exceeds the standards found on the local labor market. Although indicating a positive step in terms of standards, these figures reappear in a somewhat more controversial manner when the workers analyze these working conditions in greater detail.

These positive characteristics appear again in the replies on the corporate incentive policies for the employees. The majority indicated that the incentive policies are good and excellent (38% and 15% respectively). However, a significant number suggest that there are weaknesses in this area: 14% rated these policies as poor and 27% as only fair.

The set of positive ratings in this survey also seems to reflect the fact that most of the employees (86%) stated that they were proud of working for VW and the companies in the modular consortium (see Table 9). In slightly more detail, this demonstrates a direct link between this “pride” with the fact that a steady job in the plant allows the employees “to be respected as workers” (66%) and to “guarantee a future for their family” (76%). The job also offers “encouragement to study” (49%). Although wages are important in this analysis, they are certainly not mentioned as a decisive factor for this satisfaction, as the item on “getting a good wage” ranks only fourth (42%).

Even with a largely positive assessment of the working conditions, it is worthwhile stressing some indications of problems in these conditions offered by the company, which are outlined below.

Although 62% declared that they felt no discomfort on the job, a relatively significant number of all employees (38%) stated that they work under uncomfortable conditions, to a certain extent contradicting the previous replies. Among them, 53% indicated that they work under uncomfortable conditions all the time (28%) or for much of the day (25%), although most

of them (44%) did not rate their work as monotonous. Added to this is the fact that 90% indicated that they are subject to problems in the working environment (see Table 4) with most mentioning noise (80%) followed by smoke (39%) and heat (27%).

Another point that indicates the existence of a problem was related to work pressures. Although 39% indicated that they had never been subject to any pressure at all, most of them (61%) replied that they were under some type of pressure, with 9% stating that they felt heavily pressured, 15% fairly pressured and 24% slightly pressured. The highest rating for the origin of the pressures was the management (6%), followed by workmates (5%). On the other hand, pressure appears more clearly in the Table on work-related concerns while outside the plant. In this case, 36% stated that they were very concerned and 23% were fairly concerned, compared to 14% who were never concerned.

The pace of work was indicated as being correct by 42% of the employees. However, a significant number rated this fast (35%) or very fast (20%), making a total of 55% (see Table 5). These data seem to be directly related to the high percentage of workers, indicating that they were tired after work on at least some days (58%) and who stated that they were tired every day (14%). However, it should also be noted that 11% of them stated that they were never tired after work (see Table 6).

The issue of the pace of work also seems to affect the social life of the workers, as some 56% of them declared some type of withdrawal from social activities as they felt tired after work (see Table 7). This information is associated with the data on the frequency with which the workers feel exhausted after their working day. This may be rated as high, as 59% indicated that they felt exhausted some days of the week, while a further 14% stated that this occurred every day, and 11% opted for most days. On the other hand, 10% replied that they never felt exhausted after work.

The potential of this aspect can be brought out through the concern of the employees with their work, as 36% of the workers stated that they were very concerned about their work, even when not on the job. The ratio between fatigue and withdrawal from social activities may also be linked to the fact that television was the type of recreation activity selected most frequently by the workers.

Although the Resende plant is moving up in terms of competition with other companies in the auto-assembly field, its employees indicate much concern over keeping their jobs (see Table 8). On this issue, most of them stated that they were either worried (48%) or very worried (22%), confirming that this is one of the most sensitive aspects in the life of industrial workers within the

current economic context in both longer-established industrial areas as well as those that have developed more recently.

In terms of relationships between management and employees, the assessment was also positive, with 62% stating that the managers were open to dialog and 28% indicating that they accepted worker participation in important decisions. Only 10% selected the “authoritarian management” option. Furthermore, 87% stated that they were satisfied or very satisfied with their immediate supervisor.

One of the factors contributing to this positive assessment may be the fact that 34% of the workers stated that they were consulted to a reasonable extent over alterations within the company, and 36% indicated that they felt they were fairly consulted at these times. Together, these percentages give a high consultation rating by the workers. In counterpart, almost one-third (29%) felt that they were consulted to only a limited extent.

It should also be stressed that monitoring the work by the management in the plant seems to be very intensive (see Table 10) as 24% felt that the managers monitored the work very closely, 22% closely and 29% fairly closely. Only 6% stated that they did not feel that they were being supervised. The data covering the supervision of the work by the management may possibly be closely related to the previous mention that the management was the main source of pressure at work. However, in view of the similar ratings between this and the second source of pressure – workmates – it seems that in-house pressures are diffuse, with the workers themselves at times responsible for this

### **Assessing Trade Union and Factory Representation**

In terms of political and trade union participation, the survey gathered information on the views of the workers covering – among other aspects – the entities representing their interest, such as the trade union and the factory committee.

The data show that a significant number (63%) of workers in the plant belong to the trade union, with 48% stating that they participate in trade union activities. This seems to indicate that although the company set up shop in Resende quite recently, and despite the fact that the local Metalworkers’ Union lacked experience in working with the automotive sector, trade union actions have been effective and convincing for the employees, encouraging their participation and defending labor interests. The three types of participation mentioned most frequently were meetings (55%), barbecues (16%) and courses (13%), <sup>5</sup> indicating activities that are focused more

---

<sup>5</sup> Generally foreign language courses.

on resolving issues with VW and the companies in the modular consortium rather than activities organized by the trade union itself in terms of training and social aspects.

In general, the trade union was rated favorably by most of the interviewees, with 49% ranking its actions as reasonable and a further 32% as good and excellent. However, around one-fifth of the interviewees rated trade union actions as negative (see Table 11). This seems to indicate that despite its acknowledgement as a consolidated representative entity, its powers of persuasion should be more effective.

Divided into items, the trade union ratings show that the employees expect their representative entity to play a more active role in the plant, protecting their interests. For instance, in terms of the trade union performance urging healthier working conditions within the company, 39% of the workers said that the trade union was working hard on this aspect, but a similar percentage (38%) stated that the necessary efforts were not undertaken. On the item covering “pressuring the management to introduce alterations in the work process”, 43% stated that the trade union was trying hard on this matter, while a further 28% felt that the entity was not trying hard enough. In terms of providing information to workers on processes under way in the plant, 31% stated that the trade union was trying hard on this aspect; however, once again a similar percentage (28%) felt that it was not trying hard enough on this matter.

The item rating the most important issues that should guide trade union actions indicated that the most important were: job stability (71%); organizing vocational training courses (70%); wages (63%) and working conditions (51%). This reflects the deep concern about their jobs felt by the workers at this plant, aware that upgrading their skills is vital on this labor market. On the other hand, they remain alert to the basic representation functions in the plant, such as wages and working conditions. It also seems quite clear that more specific ratings prevail, while those of a more general nature such as the struggle for land, protection of State-run enterprises, etc. are clearly relegated to the background.

Looking at the data for the worker assessment of their factory committee, which was set up fairly recently, it, seems clear that it scored higher than the trade union (see Table 12). Perhaps due to this daily presence on the factory floor, a majority of 54% rated the actions of this committee as good and excellent, with 32% rating it as fair. Only 13% of the interviewees gave it a negative rating.

The employees also outlined their expectations in terms of the role of the trade union and the factory committee. For the trade union, there is obvious concern over “dialog with the company” indicated by 82% and confirming their concern over their jobs, with a coherent request

also appearing for more attention to vocational training (81%). The traditional function of the trade union – to organize the workers – ranks only third in their expectations (62%). The activities suggested for the factory committee include tasks that are typical of this kind of entity: relationships between the company and its employees (85%), settling routine problems among the workers (68%), and forwarding problems to the trade union (59%).

Once again, this indicates that the Volkswagen workers perceive their representative entities as being focused more on issues that are closely related to their daily lives at work, with much weight assigned to representing them to the company and concern over the future in terms of either guaranteeing their jobs or upgrading their performance through vocational training.

However, it is quite surprising that although it has had only a relatively brief length of time to adapt to this new production process that was established in 1996, the trade union is already obtaining positive ratings. For the factory committee, this positive rating seems to indicate that it is doing its job properly, closely attuned to employee demands. Its ranking – higher than the trade union – could well have been expected, as it functions within the plant itself, bringing it closer to the daily problems faced by the workers.

## OUTLINING A PROFILE

Based on this general set of data, a basic outline of the characteristics and opinions of the factory-floor workers can be drawn up for both Volkswagen itself and the modular consortium companies.

In terms of his social and economic characteristics, the metalworker employed by the Resende plant:

- is mainly young, married with children, male, Roman Catholic; he/she identifies himself/herself equally among black, white and mixed-race;
- was born in Rio de Janeiro State, mainly in the Resende municipal district; most own their own homes and live in districts in Resende;
- has largely completed high school or a college course, with a significant number of workers still studying;
- earns three to five minimum wages;
- completed his vocational training through SENAI;
- has a work-record that is not associated with the industrial sector in most cases;
- was recommended for work at the plant by a friend or relative;
- In terms of labor relations, the metalworker:

- rates his working conditions as good, together with his relationships with the company and the management;
- is proud of working for the plant, and is respected as a worker for this reason;
- is very worried about unemployment;
- feels pressured by work when not on the job;
- feels that the pace of work at the plant is fast, reflected in fatigue after work;
  
- In terms of trade union participation, the VW worker:
- is generally a member of the trade union, with one-half taking part in trade union activities, mainly meetings;
- rates the activities of the Metalworkers' Union and the factory committee (established in 1999) as fairly positive;
- has an extremely positive stance regarding the activities of the factory committee and feels that its intermediation is essential in relationships with VW;
- is very concerned about keeping his job and feels that it is a function of the representative entities to enter into dialogue with the company and function in the vocational training area.



## REFERENCES

- Abreu, Alice; Beynon, Huw; & Ramalho, José R. (2000). “The Dream Factory: VW’s Modular System in Resende, Brazil”. *Work, Employment and Society*, Vol.14, Issue 2 . UK, Cambridge University Press.
- Abreu, A. & Ramalho, J.R. (2000) “A indústria automobilística brasileira e a implantação de novos pólos de desenvolvimento regional – o caso do Rio de Janeiro”. III Congreso Latinoamericano de Sociología del Trabajo. Buenos Aires, May 17 – 20, 2000.
- Arbix, Glauco & Rodríguez-Pose, Andrés (1999) “Estratégias do Desperdício - A Guerra entre Estados e Municípios por Novos Investimentos e as Incertezas do Desenvolvimento”. *Novos Estudos CEBRAP*, No 54, July 1999, São Paulo.
- Arbix, G. (2000) “Guerra Fiscal e Competição Intermunicipal por Novos Investimentos no Setor Automotivo Brasileiro”. *Dados*, Vol.43, N.1, Rio de Janeiro.
- Ramalho, J.R. & Santana, M.A. (2001) “The VW’s modular system, regional development and workers’ organisation in Resende, Brazil”. *9th GERPISA International Colloquium Reconfiguring the auto industry: merger & acquisition, alliances and exit*. Palais du Luxembourg, Paris, June 7 – 9, 2001.
- Ramalho, J.R. & Santana, M. A. (2002) “A indústria automobilística no Rio de Janeiro – relações de trabalho em um contexto de desenvolvimento regional”. Belo Horizonte, IRT, work in progress.
- Ramalho, J.R. & Santana, M. A. (2001) “Promessas e efeitos práticos da implantação da indústria automobilística no Sul Fluminense”, XXV Encontro Anual da ANPOCS, Caxambú, October 16 – 20, 2001.
- Stewart, Paul et al (2001) “Control for whom? Work organisation automobile industry in the North America”. *Actes du GERPISA*, No 30, Paris, October 2001.