CHAPTER - 3
PROFILE OF AMARA RAJA GROUP OF COMPANIES, TIRUPATI

Indian battery market

The domestic storage battery market (organised sector) is estimated at about Rs. 65 billion at current lead prices, comprising industrial batteries (Rs. 32 billion) and automotive batteries (Rs. 33 billion) businesses. Moreover, the unorganised sector is estimated at Rs. 20-25 billion. The automotive battery business accounts for about 55% of sales value, while the industrial battery business accounts for the remaining 45%. The automotive battery business can be further divided into the OEM and aftermarket sectors. Demand for automotive batteries largely depends on the growth of automobile OEMs and the aftermarket. During the year under review, the automotive batteries market grew about 30% in OEM and about 10% in the aftermarket market. The OEM and replacement markets are expected to experience about 18% growth in the segment OEM and 11% in the aftermarket segment in 2010-11. The growth in the industrial batteries business is driven by infrastructure and technology-related industries such as telecommunications, UPS and power. VRLA technology caters to 75% of the industrial storage battery market. The ongoing slowdown in telecom impacted the off take and price of VRLA batteries, after healthy growth in the recent three years. The market for UPS batteries is expected to grow about 10% in 2010-11, aided by a reviving momentum in the services sector and e-initiatives of the Government(s) of India.

“A few Indian majors have already established facilities outside looking at the potential and acceptability in those markets. Coupled with recessionary trends in the domestic market, it is but natural that this trend would continue and would contribute further to sales of Indian batteries manufacturers in the coming years,” At present, exports from India are mainly to US and SAARC nations. The US alone contributes to over 60 percent of the total exports in volume terms, 35 per cent exports go to the SAARC countries with the balance going to South East Asia and Africa. “Indian manufacturers are now eyeing the European market which is today a large battery marketer in the world.”
ARBL is India’s second largest battery manufacturer with 46%CAGR in sales over the five years leading to 2009-10. The Company created a sizeable net worth of Rs. 5,437 million with a debt-equity of 0.17 as on March 31, 2010. Amara Raja Group employs about 8000 employees in all its 7 units established in and Tirupati town.

Amara Raja is one of the companies which started in the year, 1985 and reached to the international standards and trends in its various activities such as, production, technology, administration, philosophy, mission and its vision. Amara Raja believes in influencing and improving the quality of life by building institutions that provide better access to better opportunities, goods and services to people all the time. With innovative engineering, research and design, Amara Raja has grown with partnerships and information sharing with world leaders. Amara Raja is committed towards latest generation technologies by developing and manufacturing globally competitive, customer focused products of world class quality and responsibly introducing these products into relevant markets. Amara Raja Batteries Ltd, (ARBL) is the largest manufacturer of Standby Valve Regulated Lead Acid (VRLA) batteries in the Indian Ocean Rim comprising the area ranging from Africa and the Middle East to South East Asia. Based in Chennai, with a fully integrated manufacturing unit for its industrial batteries at Tirupati, Amara Raja has reached a position of leadership in a short span of 7 years.

Amara Raja is in a strategic partnership with Johnson Controls Inc., USA. With this, ARBL is in Global Supply Alliance with Varta AG of Europe and Enertec, who are joint venture partners of JCI in South America and Mexico. The Business Group of Amara Raja is categorized as Industrial Battery Division, Automobile Battery Division and Power System Division.

ARBL is the largest suppliers of stand-by power systems, catering to Indian utilities such as, Departments of Telecommunication, Indian Railways, Power Generation Stations, MTNL, VSNL, ITI and HTL. The company has preferential status with most MNC-OEMs such as ABB, Alcatel, Ericsson, Fujitsu, Lucent, Motorola, Nokia, Tata Liebert and Siemens. ARBL has prestigious Automotive OE clients including Ford, GM, Daimler Chrysler, Ashok Leyland, TELCO, and Mahindra & Mahindra. Amara Raja has a replacement Battery Brand Amaron hi-life. ARBL has a
capacity for manufacture of around 1,000,000 units at its facility at Tirupati with an investment of US $ 10.00 million. A Greenfield project is planned at the same site with an additional investment of US $6 million to augment capacity to 2 million batteries. The Amaron hi-life battery is a product of the collaborative efforts of engineers at Johnson Controls Inc. and Amara Raja.

**Brief about the Promoters of Amara Raja Group of Companies:**

Sri Ramachandra N.Galla, a non-resident Indian now settled in India is the main promoter. He is a post graduate engineer with over 16 years experience in power systems as an electrical engineer in Nuclear and conventional source power generating stations across the USA. Mr. Galla went to USA after obtaining Bachelors and Masters Degree from S.V. University, Tirupati & Roorkee University U.S.A. He holds an M.S. Degree in system science from Michigan state university. After his return to India, he promoted along with Andhra Pradesh Electronics Development Corporation (APEDC). Rs.2 crores unit – Amara Raja Power Systems Ltd. – for the manufacture of uninterruptable power supply systems (UPS), Battery Chargers, D.C. power supplies & static inverters. For the year ending 31st March, 1990 this unit achieved a sales turnover of Rs. 192 lacks and earned cash profit of Rs. 14 lacks.

**History of the Company**

Amara Raja Batteries Limited was established in the year 1985 as private limited and then converted into public limited in the year 1990. The company is currently poised on a healthy growth curve and ended the financial year 2008 – 09 with a turnover of Rs.>1500 crores.

Amara Raja Batteries has a strategic tie up with Johnson Control Inc. of the USA who owns 26% stake in this company. Johnson Controls is a Fortune 500 company and also the largest manufacturer of lead acid batteries in North America and a leading global supplier to major automobile manufacturers and industrial customers.

Amara Raja has demonstrated its commitment to offer optimum system solutions of the highest quality. And has become the largest supplier of standby power systems to core Indian utilities such as the Indian Railways, Department of Telecommunications, Electricity Boards and power generation stations. Extensive plans have been charted out for the future, wherein the company undertakes to become the most preferred supplier for power back-up systems.
Amara Raja has always offered time tested world-class technology and processes developed on international standards – be it high integrity VRLA systems like Power Stack and Power Plus or the recently launched high performance UPS battery – QUANTA and Amaron hi-life automotive batteries that are products of the collaborative efforts of engineers at Johnson Controls Inc. and Amara Raja.

Amara Raja Batteries Limited comprises of two major divisions viz., Industrial Battery Division [IBD], Automotive Battery Division [ABD] and Small Battery Division [SBD].

The Group Companies are

- Amara Raja Batteries Ltd., Karakambadi
  - Industrial VRLA batteries & Automobile batteries

- Amara Raja Power Systems Ltd., Karakambadi
  - Industrial Power Electronic Products

- Mangal Precision Products Ltd., Petamitta and Karakambadi
  - Fasteners and connectors and sheet metal fabrication

- Amara Raja Electronics Ltd., Diguvamagham
  - Printed Circuit boards, Battery chargers, Digital home Inverters, Trickle chargers

- Galla Foods Ltd., Rangampet
  - Fresh Processed fruits and concentrate

- Amara Raja Infra Pvt. Ltd, Karakambadi
  - Infra & Civil Constructions

- Amara Raja Industrial Services Pvt. Ltd., Karakambadi
  - Facility Management and other Services

AMARA RAJA BATTERIES LIMITED (ARBL)

Amara Raja Batteries Limited, an Amara Raja-Johnson Controls Company with 26% equity from Johnson Controls is the technology leader in the Indian storage
battery industry, manufacturing batteries for both Industrial and Automotive applications. Johnson Controls Inc is a Fortune 500 US$ 31 bn corporation and worlds largest manufacturer of Automotive Batteries. This alliance Supplies batteries to every major auto manufacturer in the world including General Motors, Ford, DaimlerChrysler, Toyota, Volvo, Hyundai, Nissan, Honda, Volkswagen and Fiat among others.

Amara Raja Batteries Ltd, (ARBL) is also the largest manufacturer of Stand by Valve Regulated Lead Acid (VRLA) batteries in the Indian Ocean Rim comprising the area ranging from Africa and the Middle East to South East Asia. Based in Chennai, with a fully integrated manufacturing unit for its industrial batteries at Tirupati, Amara Raja has reached a position of leadership in a very short span.

ARBL is the largest supplier of stand-by batteries to core Indian utilities such as Indian Railways, BSNL, and Power Generating stations, MTNL, VSNL, ITI and HTL. Major MNCs like ABB, Alcatel, Ericsson, Fujitsu, Lucent, Motorola, Nokia, APC and Siemens are among ARBL’s clientele.

**Industrial Batteries Division [IBD]**

Amara Raja has become the benchmark in the manufacture of industrial batteries. India is one of the largest and fastest growing markets for industrial batteries in the world and Amara Raja is leading front, with maximum market share for standby VRLA batteries. It is also having the facility for producing plastic components required for Industrial & Automotive batteries.

Amara Raja pioneered the application of VRLA battery technology in India with the launch of Power stack and Improved Power stack a high integrity, long life battery designed to take care of Critical standby applications for sectors such as tele communications, railways, power generation and distribution, defense, and the oil and gas offshore. The success of this technology led to its Application in new areas such as motive power, UPS and solar energy. Amara Raja's brands in the industrial segment include Quanta - the long life UPS battery.
Incorporation

ARBL is the first company in India to manufacture VRLA Batteries (Sealed Maintenance Free). The company has set up Rs. 1920 Lakhs Plant in 18 acres in Karakambadi Village, Renigunta Mandal.

Amara Raja Batteries Limited was established in the year 1985 as Private Limited and then it has been shaped into Limited Company with the advent of GNB Industrial Battery Co. U.S.A. for manufacturing sealed Valve Regulated Lead Acid Storage Batteries (VRLA).

Products: Types of VRLA batteries manufactured in the Industrial Battery Division and their applications are as follows:

Power Stack

Applications

The major application areas for power stack can be summed up as follows:

- Power Plants
- Process & Service industry
- Railways
- Telecommunications
- Uninterruptible power supply systems
- Electronic Private Automatic Branch Exchange [EPABX]
- Defense [Onshore & Offshore Wireless Communications, Cellular Radios]
- Motive Power

BRUTE

Applications

- Forklifts
- Pallet trucks
- Stackers
- Platform trucks
Scrubbets

**QUANTA (UPS battery)**

**Applications**

Various critical applications in UPS Sector and become role model in INDIA.

- Banks, Insurance, Finance, Healthcare,
- Education, Software, IT enabled services, Corporate, Industry, Government etc.

**Customers**

Amara Raja Batteries being the first entrant in this industry had the privilege of pioneering the VRLA technology in India. With the requisite approvals and manufacturing facilities, Amara Raja has established itself as a reliable supplier of high-quality products to the major segments like Telecom, Railways and Power control.

**Automotive Battery Division (ABD)**

Amara Raja Batteries Limited has prestigious OE clients like Ford, Daimler Chrysler, General Motors, Ashok Leyland, Hindustan Motors, Tata Motors, Mahindra & Mahindra, Fiat, Honda, Maruti and Hyundai. The company entered the replacement battery segment with the launch of Amaron brand of automotive batteries in January 2000. These are the first zero-maintenance, high performance and long life batteries, with long term warranty periods in these categories and have become the benchmark for quality and reliability in their respective fields. The company has recently entered into the upcountry markets with Power Zone brand of economy batteries. Power Zone is a chain of formatted retail stores offering power solutions for automobile and household applications. Batteries are made to the specific standards of ISO 9001, QS 9000 and ISO 14001 and TS 16949 certificates using world-class Technology and quality-controlled parameters.

**Incorporation**

Amara Raja batteries Limited inaugurated its new automotive plant at Karakambadi in Tirupati on September 24th, 2001. This plant is part of the most completely integrated battery manufacturing facility in India with all critical
components, including plastics sourced in-house from existing facilities on-site. This gives Amara Raja complete control over inventory and product quality. In this project, Amara Raja’s strategic alliance partners Johnson Controls, USA have closely worked with their Indian counterparts to put together the latest advances in manufacturing technology and plant engineering.

**Products**

1. Amaron Fresh batteries
2. Amaron Hi-way truck batteries
3. Amaron Harvest tractor batteries
4. Amaron PRO
5. Amaron Hi-life batteries for Automobiles
6. Amaron Shield for Inverters
7. Amaron GO batteries
8. Power Zone

**Amara Raja Power Systems Ltd [ARPSL]**

Amara Raja Power Systems Ltd was incorporated in 1984 and was co-promoted by AP ELECTRONIC DEVELOPMENT CORPORATION [APEDC]. By virtue of APEDC’s equity participation, ARPSL has become a deemed Public Limited company as per section 43(A) of the Companies Act. ARPSL is engaged in the manufacture of Uninterruptible Power Systems (UPS), Battery Chargers (BC) and Inverters. The company had a technical collaboration with HDR Power System Inc. USA. The operations of the firm are highly satisfactory. The present credit rating of the company is ‘A’.

Product(s): Conventional Chargers, Switch Mode Rectifiers (SMR) & Integrated Power Supply System (IPS).

**Customers:** Telecom, Railways, Power Control segment and offshore platforms.
MANGAL PRECISION PRODUCTS LTD (MPPL1)

Mangal Precision Products Limited was incorporated in 1990 for manufacture of MS Battery charger Cabinets, trays, and racks for batteries, UPS-cabinets, etc. It is having all the sheet metal processing machinery starting from sheet cutting to final painting with punching, bending, welding, phosphating, and powder coating processes. The plant is located in same campus of ARBL plant in KARAKAMBADI and is registered as an ancillary unit to ARBL and ARPSL. The operations of the company are satisfactory.

MANGAL PRECISION PRODUCTS LTD (MPPL2)

Mangal Precision Products Private Limited -2 was started in the year 1996-97 to produce battery components like copper connectors, copper inserts, hardware required by ARBL & ARPSPL and other customers as required. The unit is located at Petamitta Village, Puthalapattu mandal, Chittor District, AP at a distance of 65 kms from Amara Raja Group of Companies, Karakambadi. To develop backward villages, ARBL, EC located the unit in Petamitta and provided an employment to 100's of people. The unit is having required machinery and equipment like power press break, mechanical press, cold forging machine, thread forming machine, lathe, drilling, trapping machine etc to produce the above components. These components are electroplated and dispatched to ARBL and ARPSL.

AMARA RAJA ELECTRONICS LIMITED (AREPL)

PRODUCTS

Manufacturing home inverters in the name of XENON. Also manufacturing the Printed circuit Boards (PCB) assembly on job work basis for M/s Amara Raja Power Systems Pvt Ltd., Tirupati. Printed Circuit Board assembly for sale to original Equipment Manufacturers. [OEM]

GALLA FOODS LIMITED

GFL was inaugurated on May 4th 2005 and is located in the Agri Export Zone in Chittoor, which is the second largest producer of fruits in India, with mango, being the largest produced fruit.
Products

1. Fruits pulp and Puree
2. Mango pulp and concentrate
3. Papaya pulp
4. Tomato puree/paste
5. Guava pulp

Amara Raja Infra Private Limited (ARIPL)

Amara raja group entered into a new business venture like Infra & Civil construction and it was established on 29th May, 2008. ARIPL is a part Amara Raja Group of companies & taking responsibility of Internal Civil constructions, Electrical projects and infra development across the Amara Raja Group.

Amara Raja Industrial Services Pvt.Ltd (ARISPL)

After a recent launch of Infrastructure Company ARIPL by Amara raja last year (2008), this year (2009) Amara raja ventured into another business of industrial services. This company will focus on facility management, property management and other hospitality related services.

The Amara Raja groups of companies engage about 8000 employees in various cadres of the organization. The Company’s HR thrust is reinforced through a well-thought-out strategy comprising continuously enhanced employee engagement, development and performance. Several programmes align its HR objectives with the organization’s business strategy:

Talent acquisition: The Company has put in place best processes to attract and retain talent. Besides lateral talent recruitment, the one-year Amara Raja GET/MT Programme

(ARGMP) inducts and intensively trains fresh talent. Appraisal: The Company develops annual individual performance plans (IPP) for every employee to structurally align it to functional balanced score card (BSC) objectives, which in turn are aligned to the Company BSC, dovetailing individual performances to organizational goals. The AREPAS (Amara Raja Electronic Appraisal System) – an in-house electronic appraisal
system – reviews employee performance, growth and development over a period. In 2007-08, appraisal transparency was enhanced through a structured 360° feedback programme, where subordinates, peers and superiors gave feedback on the quality of leadership of each individual in the senior management team. A Management and leadership programme is structured to dovetail the outlook of the senior management with the Company’s larger vision while fostering continuous innovation, the Indian Institute of Management, Bangalore (IIM-B) helped customize a general management and leadership programme. The senior management team, including the chairman and managing director, participated in this programme. Amara Raja trainee scheme at workmen level: As a part of its social responsibility initiative, the Company imparted/ upgraded technical and/or industrial skills of selected local youth around the factory through the comprehensive Amara Raja Trainee Scheme (ARTS) for workmen. It comprised classroom, workshop and shop floor training to create a grassroots talent pool. Employee engagement and employee performance: Amara Raja institutionalised “employee engagement” processes to enhance employee retention and motivation through periodic surveys/analysis/proactive actions. The Amara Raja Employee Engagement Survey findings helped formulate change action plans to enhance engagement scores or the loyalty index in identified areas. Change teams created at various functional tiers implemented the change plans. As in every year, the Company conducted its annual compensation benchmark survey to understand market trends and devise strategies to keep the company’s compensation structure attractive.

The annual review of the organization structure, aligned with business plans, helped the Company arrive at relevant strategies to make it nimble, transparent and responsive to the ever-changing market conditions. Technology-driven HR processes and systems: The Company’s people-centric HR systems are powered by cutting-edge technologies. The ARG-HR Portal an intranet portal that interfaces between HR and employees disseminates Company policies and latest organizational developments, besides giving employees direct access to the HR department through queries and feedback. Employees can also download forms concerning LTA, leave, loan and travel reimbursement applications, among others from the portal.

The e-Induction programme, which currently is being processed, is expected to cut down travel time and expenditure, facilitating the seamless induction of new employees across locations.
ARBL believes in creating a socially and economically vibrant community to inspire growth and self-reliance within and outside the Company. Towards this end, we chose to address five key areas for holistic development: Education: We have provided primary schooling facilities for our employees’ children. Our employees made a significant contribution to Krishna Deva Raya Educational Trust and Cultural Association (KECA). It is helping meritorious and economically backward students with financial assistance to pursue higher education. Infrastructure: We responsibly established daily infrastructure needs: a bank and post office for employees and the public; residential complexes, subsidised transportation and recreational clubs for employees. Village development: We focused on and participated in large scale rural development, building roads, rainwater storage tanks, supply channels, de-silting of water tanks and check dams. We remained committed in investing significant time and resources on all ongoing and long-term initiatives for ‘Grameena Vikasam’.

**Environment**: Environment remained a core business value, reflected in widespread, proactive environment programmes like green belt development, energy conservation, water harvesting, as well as the installation of world-class air and water pollution control equipment.

**Employment**: the Company ventured into the semi-urban and rural markets with the Power Zone distribution network, providing employment to more than 1,000 individuals. Their network expansion – proposed 800 outlets increased employment opportunities for the rural workforce.

The year 2009 witnessed the harsh fallout of the unprecedented global economic turmoil. As per IMF estimates (January 2010), global economic growth contracted around 0.8%, led by the advanced economies which contracted 3.2% while emerging economies declined 400 bps to 1.7% in 2009 (2.1% in 2008). The intensity of the global meltdown in 2009 would have been harsher but for China and India. The cumulative efforts of most governments curtailed the depth, span and intensity of the economic catastrophe, although the possibility of some economies defaulting continues to haunt the world. IMF estimates suggest a positive economic rebound in 2010 with the global economy projected to grow at 3.9%; advanced economies is expected to grow 530 bps to an estimated 2.1% while the emerging world is expected to grow 390
bps to about 6%. Further, WTO projects world trade to expand 9.5% with the advanced
world increasing 7.5% and the emerging world 11%.

Over the last decade, the global economy was primarily driven by the emerging world, China and India being the two most important contributors. This trend is expected to sustain. This is because of an important reality – emerging economies have multiple engines catalysing their economic growth: demographic advantage, growing industrialization and increasing urbanization. Through the global meltdown, the advanced economies suffered the most and are expected to take the longest to revive. The emerging economies on the other hand, displayed their resilience and retrieved the global economy from the brink, strengthening their prospects of becoming preferred investment destinations. The possibility that Asia could become the world’s largest economic region by 2030 is not idle speculation. It seems very plausible based on what Asia has already achieved in recent decades: emerging Asia’s share of world trade has doubled and of world GDP tripled in just the past two decades.

This Zero maintenance product incorporates the latest technological advances in the field and is on par with batteries manufactured and marketed in developed countries. A fully charged, factory-activated battery provides extra high starting performance and power at any temperature. The Power System Division is an important supplier of SMR based power plants to Telecom Industry, the key customers being the Telecom switching Equipment Manufacturers. As the company saw a growing business proposition in the integrated power supply, the production capacities of the same have been augmented. IPS using SMPS technology, for usage in Railways has been added into the product basket.

The company also designs custom-built power electronics products like Industrial Battery Chargers, Charge Discharge Circuits, Formation Chargers, AC/DC distribution boards etc. Progressive conformance of Amara Raja to changing global standards and processes made it achieve ISO 9001 and the QS 9000 Certification.

Amara Raja ventured into business with the introduction of industrial batteries in 1991. It pioneered the Maintenance Free-Valve Regulated Lead Acid battery (VRLA)
technology in India and since then transformed the face of the industrial battery business in various user segments. Amara Raja’s industrial battery business is engaged in manufacture of high quality VRLA batteries through unmatched performance and reliability.

The product range of Amara Raja caters to the growing needs of the telecom, UPS back-up systems, railways, solar power and power utility sectors. Some key customers include Indus towers, Bharti Airtel, GTL, VIOM networks, Tower vision among others in the telecom segment. In Indian Railways, Amara Raja’s products are used in more than 40% of II and III tier air-conditioned coaches; they also support train lighting, and signalling and telecom (S&T) power supply solutions. Amara Raja has emerged as a market leader in the medium VRLA product segment for commercial UPS applications and enjoys long-term supplier relationship with national OEMs such as Emerson, Numeric, Delta, DB Power, Tritronics and Uni-line, among others. The AQuA channel partners helped Amara Raja to expand its reach in critical user segments in the UPS business such as BIFS (banking, insurance, finance and services) sector, government sector, IT/ITES, manufacturing industry, among others. Long-term strategic relationships with customers enabled Amara Raja to achieve 32% CAGR in the five years leading to 2010-11.

Products and applications

Amara Raja’s products comprise large, medium and small VRLA batteries. The industrial battery product portfolio offers capacities ranging from 4.5 Ah to 5,000 Ah. During 2010-11, Amara Raja introduced AMARON VOLT™ Hi-Life batteries – 2Vhigh integrity series, designed to be robust, enduring and reliable.

In the telecom sector, the batteries support switches and transmission (wireline and wireless) networks; the Indian Railways uses these batteries in coach air-conditioning; the batteries also support the transmission and distribution networks of power stations. The UPS batteries support IT and ITeS operations as part of UPS systems that regulate power supply to critical equipment during voltage fluctuations. Small VRLA batteries, launched in 2009-10, find application in small UPS and emergency lamps.
Product portfolio

<table>
<thead>
<tr>
<th>Brand</th>
<th>Rating</th>
<th>Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amaron Volt™</td>
<td>2V/300 – 5500 Ah</td>
<td>Telecom network power for tropical installations, power stations, data centres, oil and gas, and other industrial applications</td>
</tr>
<tr>
<td>Power Stack</td>
<td>2V/100 – 6000 Ah</td>
<td>Telecom exchanges, power stations, oil and gas, Indian Railways and other industrial applications</td>
</tr>
<tr>
<td>Quanta™</td>
<td>12V/4.5 – 200 Ah</td>
<td>UPS segment, IT and ITeS industry, corporate and hotels, among others</td>
</tr>
<tr>
<td>Power Sleek™ (Front Terminal Access)</td>
<td>12V/100-150 Ah</td>
<td>Wireless telecom networks, UPS application and other niche applications</td>
</tr>
</tbody>
</table>

Manufacturing facilities

Amara Raja’s industrial battery manufacturing facility in Tirupati houses technologically advanced infrastructure for producing the large and medium VRLA batteries. The plant is ISO 9001, ISO 14001 and OHSAS-accredited and is periodically audited by customers. The manufacturing facilities are established with best-in-class equipment backed by best practices in quality assurance systems along with lean manufacturing principles. In 2009-10, Amara Raja consolidated manufacturing lines for Large VRLA and Medium VRLA products under one roof and consequently derived operational efficiencies and resource utilisation benefits.

Key initiatives

The industrial battery business unit embarked on a number of initiatives during the year to maintain the leadership position in the served markets and respond to the challenges posed by the unfavourable supply-demand situation in the telecom sector where supply is far out number the shrinking demand. These initiatives span marketing / sales functions, manufacturing operations, product development efforts, quality systems and procurement practices.
Distribution network

In 2009-10, the Amaron® network expanded to more than 200 franchisees and 18,000 retailers, and PowerZoneTM network to over 700 outlets. The Company launched Amaron® Pit stops in urban areas and Power ZoneTM outlets in semi-urban and rural areas. The Amaron® Pitstop format was ranked among the top franchising opportunities in India. The Company’s unconventional marketing channel comprises auto mechanics, lube retailers and small shop-owners.

The revival in India’s automobile industry and the government’s thrust on road building will catalyse industry growth. Factors like low vehicle penetration, increasing GDP growth and growing competition will enhance the price-value proposition for customers, widening the market .Low vehicle penetration: India’s low passenger vehicle and two-wheeler penetration per 1,000 people at 11and 66 represent an opportunity.

Investments accelerating volumes: The Indian automobile industry expects to invest up to Rs. 80,000 crore in fresh capacity in four years and car manufacturing capacity is set to rise to 57 lakh units by 2015, according to Ernst & Young, as the industry sustains a 10-15% CAGR. Replacement market: Generally, an automobile battery lasts for about three years, creating the need for replacement. Robust sectoral growth projection provides an attractive opportunity in India’s replacement market.

Road ahead, 2011-12

Enhance manufacturing capacities, both in automotive and motorcycle battery plants, by 20%and 100% Invest in low-cost automation, enhancing productivity and quality Extend reach and improve brand Visibility.

Shop floor

The industrial batteries unit’s manufacturing facility is ISO 9001 and ISO 14001-accredited and periodically audited by client representatives. The manufacturing infrastructure is built with state-of-the-art equipment and robust process control measures. During 2009-10, the unit optimized operational efficiency through the following initiatives: Shifted its medium VRLA battery lines from the automotive plant
to the industrial batteries plant, consolidating industrial battery manufacturing under one roof;

- Reduced battery charging cycle time by 20% through a novel pasting chemistry.
- Integrated planning process with SAP leading to accurate planning and timely course correction
- Developed a special purpose machine in-house, saving significant capital expenditure
- Installed power factor control equipment, leading to significant energy savings
- Reduced lead scrap generation and increased re-utilisation
- Established 28 Quality Circles for process improvement
- Initiated TPM and various Continuous Improvement (CI) programs

**Current outlook**

The industrial battery market is largely influenced by demand in telecom and UPS segments while renewable energy and motive power sectors are likely to emerge as new growth drivers. Telecom: The Indian telecom market came of age last year, emerging as one of the world’s fastest growing and most competitive markets. But intense competition in the wireless-dominated telecom services in the country also forced operators to reduce tariffs to the brink of sustainability. As fallout, operators will pursue new revenue-generating opportunities as the subscriber growth rates will moderate. Tariff stability, potential M&As, launch of 3G/BWA services and introduction of mobile number portability are some of the key developments that will characterise the telecom industry dynamics during FY11. While the network expansion will focus on reaching rural subscribers, the corresponding challenges in power supply management in power deficit geographies will trigger more innovative products, services and business models in the telecom network power solutions. With India’s tower population crossing over 350,000 across the country, network expansion activity slowed; the focus of tower operating companies is on enhancing efficiency and maximizing utility by increasing the tenancy ratio. The demand for batteries is expected to be moderate with marginal or flat growth, with battery replacement cycle driving
demand. As the battery industry witnessed significant additions in capacity by existing suppliers as well as new entrants, supply outstripped demand requirements, creating unfavourable pricing trends in the industry. While this put a pressure on margins, the Company is leveraging its strong customer relationships to enhance market share and sustain volume growth. UPS – Large scale computerisation of banking networks and government departments, aggressive growth in the IT sector and increasing demand for data services catalysed UPS sales. Hence, battery demand in this segment witnessed over 15% CAGR across the last five years. PC sales, server sales and laptop sales continued to see a healthy growth in demand at 15% CAGR. Addition of high powered data centres in telecom, IT, BFIS and government sectors, continued growth in ATM population at 18% CAGR and massive government-funded projects such as Accelerated Power Development and Reform Program (APDRP), National e-Governance Plan (NeGP), will continue to drive the demand for UPS batteries. The Company is rightly poised to capitalize on this opportunity with the recently expanded capacity for UPS batteries, countrywide AQuATM channel network and strong OE supply relationships. The company outpaced market growth significantly with 28% market share in FY10 and will continue to drive volumes aggressively. While imports sources and upcoming players will continue to exert a pressure on realisations, the company will leverage its product and channel strengths to emerge as a market leader over the next couple of years.

Human resources

The Company’s strong focus on people continues to be reinforced through a well thought-out strategy: ‘Facilitating achievement of business objectives in an invigorating work environment through continual enhancement of employee engagement, development and performance. All people initiatives and programmes are aligned with the business needs of the automotive and industrial battery units. During 2009-10, the Company was recognised for its HR strategy by the Employer Branding Institute of India through the following awards: Best Employer Award in the Electronics Industry category – All India Award for Continuous Innovation in HR Strategy at Work – National Round Award for Excellence in HR through Technology – Southern Region. The organisation remains young with the average age of employees at 31 years as on March 31, 2010. The total number of employees on the Company’s
payroll as on March 31, 2010 was 2,493. Strategic business unit formation and people alignment. During the course of the year, the organisation restructuring was carried out wherein two strategic business units were formed—automotive and industrial batteries business—with the objective to enhance focus and value. The Strategic Business Unit (SBU) structuring was implemented to better serve the demands of each business, which has unique customers and competitors needing specific leadership focus and attention to grow beyond, thereby higher ability to take advantage of business opportunities in related segments and markets, rapid customer service and product cycles, among others. Clear re-organisation and alignment initiatives were taken up to form leadership teams for both SBUs. The organisation is proud of having appointed SBU heads from internal talent and most leaders from within each SBU.

**Talent acquisition**

The exclusive talent acquisition cell continued its focus on acquiring and inducting talent across the organisation. The SBU leadership teams hold the primary responsibility of building their respective business teams. ‘Nava Pratibha’ programme, a unique program wherein fresh talent is inducted in a systematic and structured way, was well-executed during the last year. Nava Pratibha covers workmen, staff and management levels through customized programs like Amara Raja Training Scheme (ARTS), Amara Raja Graduate and Technician Training Programme (ARGTP) and Amara Raja Graduate Engineer Trainee (GET), Management Trainee (MT) Programme (ARGMP).

**AR e-Induction**

The Company’s intranet-based e-induction enables the on-boarding process that anew employee is required to complete within three days of joining. It is designed with quizzes and interactive content to ensure faster alignment to the organisation. The program has separate modules on the Amara Raja Group, for all the companies in the group, CSR and a separate module dedicated for people development. The modules are structured in a manner to provide all necessary information to familiarise the new recruit on the different companies’ products, processes and the various milestones. Learning and development Amara Raja Learning & Development Calendar (ARLDC) captures the development needs of the people at all levels and anchors the programs.
ARLDC integrates the needs arising out of performance appraisals, TQM and TPM initiatives. During the year, specific in-house programmes were anchored to build both technical and soft skills.

Employees were also nominated for specialised learning and development workshops/seminars organised by external learning institutions/agencies. Respective SBU teams anchored their specific team building workshops to help them align with their customer needs and the overall business needs. The team workshops were also anchored to generate togetherness and harmony in achieving the business objectives that they set for themselves as an SBU as well as the Company at large.

**Employee engagement**

The Company’s endeavour to get closer to the employees’ minds and hearts, and understand what they feel and perceive started with the launch of AR-Speak survey comprising 19 dimensions in 2008. During the year, a similar employee engagement survey was anchored in August 2009 and 99.83% of people participated in the survey. Based on survey inputs, change action plans were drawn up at various levels across the organisation and actions are in progress as per plan. The change action was driven at three levels to ensure a broad-based representation and the philosophy of positive change was made a habit among all. The leadership team members comprised ‘Change Leaders’ for their respective functions. These leaders have ‘Change Champions’ who will in turn be leading a team of ‘Change Owners’. The change owners are leaders of small teams that develop and implement the change action plans at the grass-root level of front line staff or workmen at shop floor. The Company has an AR-Speak ambassador to monitor the change action plans and support the teams. One AR Speak convener worked along with the ambassadors to ensure the rollout of the entire plan. Specific change action plans based on the low scores and the criticality of the dimension, that is specific to a function/department, were developed and implemented across the Company.

**HR portal**

ARG-HR portal, the employee’s intranet portal serves as the window of HR to the organisation with up-to-date information on important events and milestones and
details of the policies. The portal has an active learning forum, an interactive facility to give feedback or ask any query monitored closely and responded to immediately. CII-HR excellence on site assessment in the organization The organisation adopted the Confederation of Indian Industry-Human Resources (CII-HR) Excellence Model. For the first time, during March 2010, the organisation participated in an external onsite assessment. The assessment by external assessors (appointed by CII) was on the HR strategy, processes and practices based on the HR excellence model. This assessment will enable the Company to excel further in human resources and performance processes, practices and capabilities.

**Information technology**

Information technology is an integral part of the business. Most of the processes and operations in the organisation are fully integrated. The Company continued to invest significantly in IT assets during the year. The Company implemented SAP(ECC6.0), covering sales and distribution, production and planning, purchase, inventory, finance, costing, quality, plant maintenance, project systems and customer service. More than 50 locations(branch offices and warehouses) including head office and corporate operations office, went live simultaneously in February 2010. High-end, high-availability Unix servers were used, supported by redundant connectivity to optimise ERP performance. The Company expects to accrue benefits arising out of change in ERP from the current financial year. The Company focuses on improving security and enhancing productivity. During the year, ageing voice and switching equipment were replaced with advanced equipment to enhance efficiency at the plant locations. During the current financial year, the Company will embark on the implementation of application software like Business Objects (BO), Customer Relationship Management (CRM) and Franchisee Management System. The Company performed creditably in 2009-10. While net sales increased 12%, net profit more than doubled.

The financial statements were prepared to comply, in all material respects, with their requirements of the Companies Act, 1956, guidelines issued by the Securities and Exchange Board of India (SEBI) and Generally Accepted Accounting Principles (GAAP) in India. The financial statements were prepared under the historical cost convention on an accrual basis. The accounting policies were consistently applied by
the Company and were in line with those used in the previous years. The estimates and
judgments used in the preparation of financial statements have been made on prudent
and reasonable basis to reflect in a true and fair manner the substance of transactions,
and reasonably present the state of affairs, profits and cash flow for the year.

Children and education - Arts and culture

Mangamma and Gangulu Naidu Memorial Trust (Mangal Trust): This Trust is
promoted by the Galla family to honour the ideals and philosophies of the Late Sri G.
Gangulu Naidu, father of Dr. Ramachandra N Galla, Chairman, Amara Raja Batteries
Ltd. The major thrust areas include education, training, health and sanitation. The
Mangal Trust is predominantly engaged in village transformation with a specific focus
on Petamitta and surrounding villages. This Trust works in coordination with the
government, Rajanna Trust and other agencies. Krishnadevaraya Educational and
Cultural Association (KECA): It is a voluntary organisation based at Tirupathi,
supported by Amara Raja Group and its employees. Amara Raja Group and its
employees are active contributors to all major initiatives of this voluntary organisation.
The major thrust area for KECA is to promote education through scholarships,
sponsorship of needy students, special talent identification and support of arts and
culture. Employee volunteering is a part of the Amara Raja culture and the Group
encourages all its employees to actively contribute in their individual capacity, along
with group CSR activities Commitment to corporate citizenship is expected behaviour
for employees at Amara Raja Group.

ARBL supports CSR activities through the aforesaid Trusts by extending
financial support in the form of donations. With a contribution of 0.1% of turnover in
the past, and considering the developmental activities undertaken by the Company, the
Board decided to contribute a higher of 0.2% of turnover or 2% of profit before tax
from 2009-10. Quite a few employees in their individual capacity also contribute kind
and cash to support the Trusts.

Education

The Mangal Trust acquired 80 acres during the year under review to establish
an industrial training institute in Petamitta village, expected to be a full-fledged
vocational training centre by 2012-13, when the first batch commences. This centre will
impair skills to unskilled youth and create employability. Amara Raja Group manages
two schools, one in Petamitta village and another in Karakambadi, proximate to the manufacturing facility of ARBL.

**Health**

The Trust runs two hospitals, one veterinary and one Public Health Centre (PHC) with requisite infrastructure. It applied to the government to establish a primary health centre under the PPP agreement. During the year, about 650 farmers were treated in a massive health programme organised by the Amara Raja Group in association with Galla Foods Limited, Apollo Hospitals, Dr. Reddy’s Laboratories and five other pharmaceutical companies. The farmers were provided a 60% concession and given priority cards for identification.

**Rural infrastructure**

The Trust constructed a number of community facilities – banks, telephone exchange buildings, bus shelters, toilet blocks, visitors’ rooms and roads in the communities around the manufacturing facilities. The Trust also embarked on major initiatives – encapsulated under a programme named ‘Grameena Vikasam’ for the development of surrounding villages – such as the construction of roads, rainwater storage tanks and supply channels, among others.

**Agriculture and irrigation**

Chittoor district, where the manufacturing facilities of Amara Raja group are located, receives erratic annual rainfall. The Trust constructed 22 check dams and supply channels; it deepened existing ones to help farmers increase the cultivable area in this region. This boosted ground water levels, enhancing water availability for irrigation. Around 50 villages in the Chittoor district benefited from this programme.

**Environment**

The Trust is developing a 222-acre hillock area in Pemmagutta by planting medicinal trees for herbal-cure ailments, a social forestry initiative which also provides livelihood to 40 tribal families. The Trust plans to plant 50,000 saplings in five years; last year around 10,000 saplings were planted, taking the total plantation to 19,000 plants till date.
Employment

The Company is committed to do its best to enhance living conditions of villagers in the neighborhoods of its manufacturing units by creating non-migratory employment opportunities. This includes providing industrial training to eligible villagers and the recruitment of qualified trainees.

Amaron Amaragaon

ARBL sustained Amaragaon, a scheme adopted by the Company to bridge the digital divide in rural India. It opened internet centres in collaboration with an NGO Dristee, across four states. This initiative empowered the rural population with IT and provided multiple earning opportunities, including a superior marketing of products. ARBL, as part of its business expansion, opened over 700 PowerZoneTM outlets across rural market still 2009-10, creating additional employment in these areas.

At the shop floor

- Debottlenecked the Medium VRLA product lines to support aggressive sales growth in UPS segment and achieved 90%-plus capacity utilisation
- Adequately responded to the fluctuating quarterly demand for LVRLA products through optimal resource deployment and flexible operational strategy
- Aggressively pursued cost management strategies and achieved significant cost reduction through waste elimination, lower power consumption and improved productivity
- Launched specific programs under TPM and QCC initiatives to facilitate enhanced "Total Employee Involvement" (TEI)
  - Won the ‘Best Organisation Award supporting QC Movement’ for 2010 from QCFI, Hyderabad Chapter (September 2010)
  - Two QCC teams participated in state level convention and won the Gold and Silver award (September 2010)
  - Two teams participated in national level convention and one team stood in the "Excellence category" and the second team secured the "distinguished category" (December 2010)
Established state-of-the-art facilities for employee amenities to enhance occupational health, safety and environmental standards

Initiated Cost of Poor Quality measurement system under the Total Cost Management approach to strengthen quality metrics across business operations beyond shop floor line quality control systems

In the market place

Introduced AMARON Volt™ Hi-Life batteries to address the specific needs of the energy demands of the telecom sector as well as critical application demands in the solar power, data centre power, power generation, oil and gas industries, among others.

Partnered with Bharti Airtel for their African telecom network expansion programme and was selected as the preferred vendor for battery banks; supplied more than 90% of Bharti Airtel’s Africa requirements.

Strengthened the distribution channel for UPS batteries and expanded channel business portfolio by tapping solar power sector requirements.

Achieved substantial growth in the UPS segment, which helped maintain overall volume growth of 20%, despite demand contraction in the telecom segment.

Rolled out specific customer engagement programs and service campaigns to enhance customer loyalty.

Operational performance

Recorded double-digit growth in sales and production volumes

Commissioned the brown field expansion of MVRLA capacity – capacity enhanced to

1.80 million units

Supplied batteries to five new platforms of existing OEM customers (four-wheelers)

Launched the second variant of the motorcycle battery (Amaron Pro Bike Rider™ BETA Series) based on VRLA technology with a 48-month warranty directed at the aftermarket.
- Concluded a two-wheeler VRLA battery development agreement with Honda, Japan
- Launched a 6V/120 Ah battery for train lighting applications for Indian Railways
- Commercialized the premium range of Power Stack™ (LVRLA) batteries
- Expanded the Quanta™ MVRLA range – 26Ah to 200Ah
- Widened the Amaron® distribution network to over 200 franchisees and 18,000 retailers;
- Strengthened the PowerZone™ presence to over 700 outlets in semi-urban and rural locations and 75 AQuA partners for distribution of Quanta™ batteries.
- Underwent HR Excellence and Total Cost Management maturity assessment by Confederation of Indian Industry (CII).