P I Industries Ltd

BSE: 523642 | NSE: PIIND | ISIN: INE603J01030
Market Cap: [Rs.Cr.] 8,342.07 | Face Value: [Rs.] 1
Industry: Pesticides / Agrochemicals - Indian

Management Discussions

Global economic scenario
Global economic growth is projected to strengthen from 3% in 2013 to 3.6% in 2014 to3.9% in 2015. In the advanced economies, growth is expected to increase to 2.25% in 2014while in the developing economies, growth is projected to rise gradually from 4.7% in 2013to about 5% in 2014 and an estimated 5.25% in 2015.
Indian economy
Indian economic growth continued to be slow for another straight year with the countryrecording a GDP growth of 4.7% in 2013-14. The year 2014-15 is likely to be one of slowrecovery, and hopefully will result in economic growth rising, inflation easing andcurrency rates stabilising.
Overview of PI Industries (PI)
PI possesses a unique business model. On one hand, the domestic agri-inputs businessfocuses on in-licensed products and exclusive marketing rights of innovator molecules; thecustom synthesis exports on the other hand intends to be the sole (or the preferred)supplier to innovators for their process research, process development and manufacturingrequirements.
The domestic agri-inputs operation has shown consistent growth. The margin profile hasundergone enhancement to a higher band over the past three or four years. PI continues tobuild strong brands around products, use intensive farmer connect initiatives andstrengthen extensive distribution capabilities. In 2013-14 PI benefitted from a goodkharif crop and good traction in rabi on the back of healthy reservoir levels.
PI's custom synthesis exports gained substantial scale in the past few years and thereare all indications that exports are moving in the right direction. PI engages withprominent names in the global agrochemicals industry, playing the role of a preferredsupplier for newly discovered products. Due to its strong order book, PI's capacities findoptimal utilisation. The high growth in this area is the result of robust volumesexpansion following commercialisation of existing molecules as well as contributions fromnewer commercialisations.
Domestic agriculture and agri-input industry At 179.9 million hectares, India accountsfor the second largest agricultural area in the world with a majority of the populationdependent on agriculture (for employment and livelihood). Agriculture accounts for 14% ofthe country's gross domestic product. India is the world's largest rice exporter andsecond largest exporter of wheat. India's agro exports during 2013-14 touched US$ 45billion as against US$ 41 billion in 2011-12 [Source: IBEF]. India's agricultural sectoris likely to grow at 5.2-5.7% in the 2013-14 agriculture year (July-June), nearly threetimes the rate of the previous year.
At prevailing yields (among the lowest in the world), India's incremental food graindemand could exceed incremental supply by ~50 MTPA over the decade.
At current yields, the annual foodgrain production per capita could decline to 188 kgper hectare by FY22 from 207 kg per hectare in FY12.
The agri inputs sector continued to perform creditably due to favourable monsoons,higher crop prices and increased output. Correspondingly, agrochemical companies continuedto report robust results while the fertiliser sector lagged due to higher discounts andinterest costs.
For the year under review, minimum support prices of key crops were raised by thegovernment. In the 2013 kharif season, the MSP of paddy (common) was fixed at h1,310 perquintal and paddy (Grade-A) at H1,345 per quintal. MSP of wheat was increased by H50
The result is that the production estimates for major crops in 2013-14 remained robust(compared to the estimates of the previous five years) resulting in a strong demand forprominent agrochemical brands.

Crop	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14 (2nd adv. est)
Rice	99	89	96	105	105	106
Wheat	81	81	87	95	94	96
Coarse cereals	40	34	43	42	40	42

Pulses	15	15	18	17	18	20
Foodgrains	234	218	244	259	257	263
Oilseeds	28	25	32	30	31	33
Cotton #	22	24	33	35	34	36
Sugarcane	285	292	342	361	341	346

[Values in million MT; # cotton in million bales of 170 kg]

per quintal to H1,400 for the 2013-14 crop year as against H1,350 in 201213. Theseincreases augur well for the country's farming sector as well as for the agrochemicalsindustry.

Outlook

With a population of about 1.2 billion, India requires a modernised agriculture sectorto enhance its food security. Demand for foodgrains is expected to double from the year2000 levels to 2030, making it necessary for the government to work towards improvingyields. This increase is urgently warranted considering that planted area growth has beenmuted and there is a scarcity of fertile land. Current estimates indicate that other thanwheat, India is expected to suffer a shortage of cereals, pulses, edible oil and sugar by2021, which could increase significantly by 2026. The only solution lies in increasingcrop yields through the prudent use of quality of agri-inputs like seeds, fertilisers andagrochemicals.

Challenges

Decline in farming popularity:

Almost 76% of Indian farmers have expressed the urge to engage in non-farmingoccupations; around 61% would prefer urban employment due to better education, health andemployment opportunities.

Storage dearth: Lack of storage facilities cause post-harvest losses estimatedannually at H58,000 crore. Supply chain inefficiencies and inadequate infrastructureremain major causes of concern. Adequate infrastructure funding (transportation,warehousing, roads and railways) could improve productivity.

Pest and insect attacks: Around 15-20% of the crop yield is lost due to pestattacks, the highest due to weeds (33%), disease (26%), insects (26%) and rodent andothers (15%).

This reality notwithstanding, India's per hectare pesticide usage (0.6 kg/ha) isfractional compared with the 14 kg/ha in South Korea and 7 kg/ha in the US.

Foodgrain production: In April 2014, governmental agencies possessed foodgrainstocks in excess of 48 MT against a buffer stock and strategic reserve of 21 MT. Thisquantum level is expected to rise sharply following the commencement of government'sprocurement in the new season.

Secondary food processing: India's processed food industry is way behind developednations, growing at 2-4% per annum as against 70-80% in developed nations. India'svalue-addition of around 20% compares poorly with 45% in some developing nations largelydue to farm produce wastage, pegged at almost 7% for fruits and vegetables and 4-6% forterms of pulses, cereals, oilseeds and poultry produce *(Source: CII).*

Low crop yield: India's agriculture sector suffers from relatively low yields owingto improper cultivation techniques, crop loss and inadequate crop protection.

Land holding: The declining size of average land holdings in India is a key reasonfor falling yields. The average holding size and arable land per capita is expected todecline coupled with increasing food demand. One way to improve yields is to use noveltyagrochemicals, which could help produce more crops with less land.

Indian crop protection sector Overview

The Indian crop protection market was estimated at US$ 3.8 billion in FY12 with exportsconstituting about 50%. The country's crop protection market is expected to grow at around12% annually to reach US$ 6.8 billion by FY17, largely driven by export demand growth of15-16% per annum and domestic demand growth of 8-9% annually. Despite the demonstratedbenefits of agrochemicals, penetration is not even 30% of the potential market. WhileIndia has consumed low value insecticides in the past, the increasing cost of labour isexpected to enhance the use of herbicides and fungicides. India's crop protection industryis largely dominated by insecticides (65%) while herbicides, fungicides and others(rodenticides and nematocides) account for 16%, 15% and 4% respectively.

Biopesticides, which currently represent only 4.2% of the overall pesticides market inIndia, are expected to grow about 10% *(Source: Business Standard, June 27, 2014).*

Growth drivers

The growth of India's crop protection industry is catalysed by the following factors:

Low consumption of crop protection products at 0.6 kg/ha, compared with the globalaverage of 3 kg/ha, emphasising significant potential for growth.

Growth in acreage under floriculture and horticulture by 50% in three years, resultingin the launch of the National Horticulture Mission, which is expected to catalyse sectoralgrowth and the consequent consumption of agrochemicals (fungicides).
Growth in India's urban population by 2.47% annually over the last decade, making itthe fastest urbanising country. India's population is expected to increase from 31% to 40%by 2020 on an enlarging base. This is expected to carve away precious arable land, aphenomenon that will have to be countered through the more effective use of fertilisersand agrochemicals.
India accounts for 17% of the world's population (growing at 1.28% annually) but only11% of the world's arable area, highlighting the need for food-related self-sufficiencyand consequently the increased usage of agrochemicals.
The total crop value lost in India due to inadequate pesticide use was estimatedannually at around USD 17 billion.
Higher minimum support prices translated into higher farmer incomes, enabling them toinvest more in superior farm practices.
The growing demand for meat, poultry and dairy need a focus on feed stock.
PI's out-of-the-box model for ushering a sustainably high growth - Domestic agri-inputs
PI offers a unique business perspective in the Indian agrochemical space. It operateson a cooperative platform with patent originators and has stood out for respect for IPR(intellectual property rights). With a compact portfolio of targeted products aimed at thedomestic market, PI is renowned for nurturing its products into big brands. These productsoffer the farmer proven increases in yield and productivity. In today's competitivelandscape, it is imperative to create a differentiated offering. In order to establish theproduct, PI carries out intense field trials, organises product demonstrations, conductsfarmer education clinics and in some cases engages in concept selling. The platformcreated by PI for brand building and the domestic distribution of its products is one ofthe best in the industry and acts as a strong competitive advantage.
The aim of this model is to obtain exclusive marketing rights for suitable innovatormolecules for Indian crops/ pests. This essentially entails an in-licensing agreementwherein the registration of the innovator molecules takes place under PI's name, giving itrights to market and distribute the product domestically and in some instances, to shareit with other companies.
Depending on the contract, PI either imports the technical/bulk formulations from theinnovator or chooses to manufacture the product at its owned factories in India. Theseagreements are usually inked with the innovator for early stage patented molecules so thatPI can realise the entire benefit of the value the molecules hold, through the majority oftheir life-cycle.
From time to time, these molecules are reverse-shared (referred to as 'co-marketing')with PI by its peers, which is a common practice followed by the industry. Under theco-marketing arrangement, PI shares important products with peers in order to establish anotable presence and a marked preference for the product in the market. Peers purchase theproduct from PI, which, in turn, retains the registration under its own name.
In India, there are two major cropping seasons, namely kharif and rabi. PI hasestablished a time-table in introducing select products prior to the commencement of therespective seasons. The potential for some of these products remains vast, even afterdelivering strong growth consistently for the initial years. PI launched two new productsin FY 2013-14 named MELSA, a post-emergence herbicide which provides effective integratedweed management for wheat, and PIMIX, a rice herbicide.
Performance summary
Domestic agri inputs showed a growth of 19% on the back of a good improvement involumes and price hikes announced for select products ahead of the major cropping seasons.A conducive monsoon during the kharif season resulted in higher sowing for key crops onenhanced acreages. MSPs trended higher vis-a-vis the previous year and acted as a catalystduring cultivation. This broad trend continued even during rabi where acreages increasedstrongly on the back of favourable agro-climatic conditions and availability of adequatewater across major reservoirs.
An optimal product mix helped PI deliver superior returns, with the Company proactivelypursuing progressive marketing strategies and supportive field initiatives for farmers.Focused product stewardship and strong brand positioning ensured consistent growth. Thegrowth was manifested in the augmentation of the Company's portfolio with a number ofattractive products being introduced over the past few years. Product launches made in theimmediate past on the other hand demonstrated excellent value proposition to farmers interms of enhancing their productivity and are expected to contribute meaningfully over theyears.
outlook
The outlook for India's crop protection industry appears optimistic. The sector isexpected to grow by around an avarage 11.5% annually to an estimated US$ 6.8 billion byFY17.

PI stands to benefit from the quality of the product portfolio (including the productsslated for introduction) and its distribution network, which is second to none. At anygiven point in time, there are 8-10 products in the registration phase, a process thatusually takes three to four years to get completed -this is what provides PI's the productmix visibility in the near-term. For the 2014-15 fiscal, PI plans to introduce twoinsecticides in the domestic market. These will be launched prior to the cropping seasonand will be suitable for a variety of crops. Although the performance of the domesticagri-inputs will depend on the quality of agro-climatic conditions going forward, PI isoptimistic about sustaining the momentum built up thus far.

Your Company continues to improve on its domestic distribution and sales model, whereinemphasis has been laid on shortening the working capital cycle, which has shownsignificant improvement vis-a-vis the previous year.

Global chemicals industry

The US$ 3 trillion global chemicals industry is led by the US and the EU. Withimproving prospects, the growth of the global chemicals sector could improve from 2.4% in2013 to 3.8% in 2014, the strongest growth expected to come from Asia, the Middle East andLatin America.

Global chemical production volume

Outlook - key countries/regions (Y-o-Y% change, 2010-2014)

The Indian chemicals industry has consistently grown 100-200 bps above the national GDPgrowth rate. India's chemical industry sales are estimated at US$ 115-120 billion in 2014.Exports grew at a compounded rate of 8-9% during 2008-13, a pace that is expected tosustain.

global fine chemicals industry

The size of the global fine chemicals industry is estimated to stand at around US$ 300billion by 2015, growing at a rate of 7-8%, largely coming out of Asia. The customsynthesis and manufacturing (CSM) segment is estimated at US$ 85 billion.

PI's custom synthesis manufacturing and exports - Partnership of equals PI Industriesis one of the leading players in the agrochemical custom synthesis exports space. TheCompany addresses issues like process research, analytical development, scale-up andlarge-scale manufacturing needs of agrochemical giants and leading global innovators.

The scope of the Company's services (related to custom synthesis manufacturing)comprises:

Contract research, process development and analytical method of development Synthesisof high purity products and impurities for analytical reference standards, five-batchanalysis under GLP conditions Scale-up studies and detailed process engineering

Commercial scale contract manufacturing

The new paradigm in the agrochemicals industry is that innovators are focusing onbuilding a pipeline of novel molecules to combat new and emergent threats to cropping.Partners like PI are playing an important role in this space. Having gained recognition asa reliable partner by virtue of its track-record in this business and for its avowedrespect for IPR, PI's name ranks foremost in global large-scale custom manufacturing.

With a knowledge library of critical reactions and wide commercial applications, yourCompany possesses a vast presence in the field of custom synthesis in India - PI's masteryof complex chemistry puts it in an advantageous position as far as adding new molecules toits pipeline is concerned.

The engagements with innovators are typically high-end in nature where your Companybecomes 'the preferred' or one of the key suppliers. Partnership with the innovators takesplace at the initial stage itself, where your Company maintains the premier relationshipstatus throughout the commercial lifecycle of the product. The validation process usuallytakes two to three years and the innovator mentions PI as its supplier in the registrationapplication for the molecule wherever it is intended for launch globally. Over the pastcouple of years, several key molecules have attained global success resulting in rapidscaling in commercialisation opportunities for your Company.

Your Company set trajectory of commercialising two to three high-potential moleculesevery year, thereby building a sustainability of revenue growth and healthy margins intothe business. PI commercialised three new molecules in FY 2013-14. Moreover, the Companysecured business for four new AIs planned for commercialisation with a peak businesspotential of USD 60 mn. The Company is exploring opportunities to forge ties with newinnovator agrochemical customers for custom manufacturing. Concerted efforts have beenmade by business development teams to secure business through long-term agreements.

Crucial breakthroughs in the process research and development by the R&D and PDteams helped in achieving cost efficiency and speedy scale-up during the year underreview. It is worthwhile to note that the team has eliminated the usage of solvents insome of the crucial processes leading to cost and operational benefits, besidesenvironmental and safety benefits. Seamless coordination between the development andtechnology transfer teams resulted in first-time right standard in the transfer oftechnology at the plant-scale. Improved operational metrics such as higher

plantthroughput, plant uptime, among others, contributed well to achieving the businessobjectives through continuous monitoring and feedback mechanism. Pro-active demandplanning, coupled with strategic tie-ups with suppliers by the Supply Chain team, aided inprocuring quality raw materials on time.

Performance summary

Custom synthesis exports scored an impressive 54% Y-o-Y revenue growth on top of alarger base followed by a sustained momentum in performance. The existing molecules scaledin line with global. The traction also came from newly commercialised molecules introducedduring the year. Jambusar proved to be a well-timed capacity addition when strong volumegains were being realised from existing operations. Utilisation levels at the SEZ facilityhave been consistently high and consequently the Company has decided go in for Phase-IIexpansion, which will be completed FY16. Overall, the facility can accommodate close tofive to six multi-product plants, thereby improving the earnings visibility andaccelerating growth momentum in the forthcoming years.

outlook

India is emerging as a preferred destination for global custom synthesis andmanufacturing. It currently accounts for a fractional share of the global CSM opportunityand is expected to grow at a CAGR of 12%. We are well-placed to capitalise on upcomingopportunities arising in the custom synthesis space given our expertise complex chemistryand experience in scaling-up molecules. PI enjoys the trust of leading global innovatorsthanks to its strong, transparent and ethical business practices. The quality ofhigh-potential molecules in our portfolio combined with steady product launches will drivegrowth for the Company and keep PI on the sectoral forefront. Plans are underway tocommercialise at least two molecules in the 2014-15 expected to deliver yet anotherquantum increase in performance.

Human resources and industrial relations

Your Company believes that people perform to the best of their abilities if they feel asense of ownership. Consequently, the Company strengthened the working environment to makeit inclusive, progressive and flexible, promoting an excellence-driven culture. TheCompany reinforced its vision, mission and values among employees. The Company fostered a performance-driven and merit-linked environment. It acknowledgedthe contributions of key performers, preparing them for challenging roles. The Companyorganised training programmes covering technical, behavioural, safety issues, code ofconduct, product training and other needs.

The Company continued to recruit scientific, technical and managerial personnel(graduates and postgraduates) from leading engineering, agricultural and business schools.A structured development programme, aligned with evolving business needs, helped groomfresh hires into prospective leaders. As on March 31, 2014, the total employee strengthstood at 1,432 and industrial relations remained cordial.

Information technology

At PI Industries, IT remained one of the key priority areas. During the year underreview, your Company invested in strengthening its IT data centre and disaster recoverysite to address growing business needs. A new IT infrastructure was 'virtualised,'emerging as a game-changing technology in the enterprise computing space. This virtualiseddata centre helped PI reduce power and cooling costs, simplify administration andmaintenance, and minimise its carbon footprint. PI also invested in a disaster recoverysite to ensure business continuity in the event of a catastrophe. Information data security was strengthened following the introduction of virtualiseddesktops. This entrusted that clients could access virtualised desktops while data wasstored in a central database, enhancing data security.

Your Company expanded the use of information technology by installing touch-screenkiosks across plants, empowering workers to manage documentation related to leaves,travel, shifts and salary slips. Other state-of-the-art systems (employee learning portalsand analytics for the supply chain function) were introduced. The Company upgraded itstechnology platform related to R&D, manufacturing, supply chain, quality, sales andmarketing.

Corporate social responsibility

PI embraced innovative socially and environmentally-sustainable initiatives. TheCompany is committed to help India achieve food security through scientific technologiesthat enhance farm productivity supported by farm extension services. During 2013-14, theCompany undertook the following CSR initiatives:

Promoted water conservation through the direct seedling of rice technology jointly withthe University of Agricultural Sciences, Raichur, Karnataka

Launched rice clinics in a joint initiative with CABI

Promoted the safe and judicious use of pesticides

Launched a certified vocational training course for chemical plant operators

Provided scholarships for SC/ST students

Water conservation: Driven by its innovation philosophy, PI continuously introducednew technologies and crop solution products. Envisaging the increasing pressure on naturalresources, PI helped farmers produce rice by conserving irrigation water. Followingcollaboration with Japanese companies, PI introduced the post-emergent herbicidetechnology for rice. This technology saved precious water at the transplanted rice stage,while controlling most weeds in direct sown rice (DSR). This technology, promoted by PIwith various NGOs and government extension machinery, was accepted as a labour, cost andwater-saving technology in various rain-fed rice growing districts. PI worked with stateagriculture universities, state agriculture departments and NGOs to distribute DSRplanters/seed drillers for free. The Company's 'Save Water' campaigns comprised thepromotion of DSR among farmers, free distribution of DSR planters, management ofdemonstration farms, farmer training and information dissemination through mobile vans.

DSR propagation: PI Industries and University of Agricultural Sciences (UAS),Raichur, enhanced awareness among 4,500 Karnataka farmers about DSR technology. Asystematic approach of DSR seed drill propagation was initiated via a customised, on-fieldpromotional approach to demonstrate the value proposition of seed drill machines amongfarmers, expedite the process of DSR adoption via 10 seed drill machines and motivatefarmers in adopting DSR by purchasing seed drill machines. This helped save water to theextent of 15-35% and minimise labour (with no transplanting and or manual weed removalneeded) cum production costs. The process was proven as safe for the environment, reducingmethane emission; improved soil porosity, declining soil exhaustion; strengthened riceyields and saving farmers Rs 2000- Rs 5000 per hectare.

PI - CABI rice clinics: PI Industries and Centre for Agricultural BioscienceInternational (not-for-profit science-based development and information organisation withnine global centres) conducted a pilot rice agro-advisory service to build grower capacityacross Uttar Pradesh, accelerating rice production and yields. CABI and PI developed anextension-based agro-advisory service aimed at increasing production and rice farmerincomes in certain pockets of Uttar Pradesh. Mimicking 'drop-in centres' as in nationalhealth systems, 16 rice health inspectors advised rice growers on crop nutrition, pest anddisease problems across nine plant clinics. The rice health inspectors maximisedgeographical coverage in Gorakhpur and neighbouring districts, visiting local villageswhere they conducted plant clinics with follow-up recommendations. CABI and PI's jointreport established the Company's Nominee Gold brand as a key DSR enabler.

Judicious pesticide use: The Company helped conserve the environment through thejudicious use of pesticides. PI conducted a nationwide training of trainers, farmers andstakeholders; thousands of safety kits were distributed free to farmers and labourers toenhance their awareness.

Vocational training course: PI Industries signed an MOU with The Centre forEntrepreneurship Development (Government of Gujarat) for skill generation in the chemicalsector in September 2012 as part of the Vibrant Gujarat 2013 event. Further, the Companysigned an MOU with Anchor Institute - Chemicals and Petrochemical, Dharmsinh DesaiUniversity (DDU). The Company conducted a three-month certificate course for BSc and MScgraduates with DDU-Anchor Institute followed by placement; Anchor DDU provided technical,faculty, training infrastructure and related support. The objective of the PI-DDU-AIcertified vocational training course for chemical plant operators was to coach sciencegraduates (BSc/MSc) from economically-weaker sections in chemical engineering concepts,industrial safety and environment practices and key processes at chemical plants. Thisprogramme, combining classroom study with real industrial experience, was directed toenhance employability among deserving students from economically weaker backgrounds. Theprogramme also helps students build interpersonal skills to enrich careers. This will bean ongoing programme.

Academic recognition: PI recognised original scientific research in the areas ofweed science plant pathology and plant protection. In 2012-13, the Late Shri P P SinghalMemorial Awards were given out to five agricultural scientists by the Hon'ble Governor ofGoa Mr. Bharat Veer Wanchoo at the National Symposium in ICAR Research Complex, Goa.

Scholarships: PI provides financial assistance by way of scholarships to deservingSC/ST students to enable them to complete their graduation.

Technical farmer support: PI adopted 19 farmers from three villages (Bakrol,Sanjali and Umarvada), guiding them with technical support in the following areas:analysis of soil samples, survey of pests and diseases, participation in governmentactivities (Krushi Mela), literature support (books, CDs, DVDs and pamphlets, amongothers) and creation of a ladies' farmer group (with support of the panchayat).

School kit and notebook distribution: PI provided school kits to 200 first standardstudents in five villages and distributed notebooks to 900 students from the second tofifth standards.

Internal control systems and risk management

Internal control systems

Your Company has in place internal control systems, which commensurate with the size,scale and complexity of its operations.

All operations at the Company are run on the SAP system. The in-house internal auditteam plans the audit schedule of all plants, subsidiaries and depots. Apart from in-houseinternal audit function, an independent external team of M/s Protiviti was engaged as theInternal Auditor to independently assess internal controls and statutory compliances invarious areas of the Company's functions and provide suggestions for improvement. Theschedule of audit was prepared on the basis of 'risk assessment' to ensure that all theassets of the Company protected against losses. It also ensured that all transactions wereauthorised and recorded in the books of the Company.

The Audit Committee of the Board was informed regularly about the significant findingsof the internal audit regarding various locations and functions to help take effectivesteps to ensure compliance.