

Name of the Ministry/Department: THE NATIONAL ACADEMY OF SCIENCES, INDIA, ALLAHABAD

Review of Annual Plan (2012-13)

Statement of Outlays & Outcomes/Targets (2012-13) (As per the Outcome Budget 2012-13) and Actual Achievement

SI No.	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12	Quantifiable Deliverables	Process/ Timelines	Achievements w.r.t Col (5) as on	Remarks
1	2	3	4	5	6	7	8
A)	<u>An Establishment of a Magnificent Ganga-gallery</u>	The river Ganga occupies an unique position in the cultural ethos of India. From times immemorial, the Ganges has been India's river of faith, devotion and worship. But the holy river <i>Ganga's</i> existence is under threat, due to enormously increasing load of pollution year by year. Therefore, the Council of the Academy during the Presidentship of Prof Asis Datta , Former Vice Chancellor, J N U, New Delhi, decided to adopt ways to make the people aware for the conservation and restoration of the holy	Rs. 223.44 lacs were spent in establishing the Ganga-gallery in the year 2010-11; and maintenance expenses were made in the current year, i.e. 2011-12 to the tune of Rs 9.77 lacs	The gallery has been completely established; and on an average regularly being visited by 40 visitors/day.	Took about a year in completion.	The gallery has been prominently placed on the U P Tourism website of the UP Govt., and also mentioned in the IGNOU Syllabus as well as IIT's Consortium on river Ganges (Gangapedia).	NGBRA has praised the efforts of the Academy.

		<p>river Ganges by establishing a Ganga-gallery with well defined objectives in order to highlight the religious, cultural, socio-economic and scientific aspects of the holy river. Prof M S Swaminathan, Prof M G K Menon and Prof Manju Sharma (Past Presidents, NASI), immensely contributed by rendering their valuable advices in developing the gallery in a systematic and scientific manner. The gallery was inaugurated by Hon'ble Sri Pawan Kumar Bansal, Science & Tech. Minister, Govt. of India on April 15, 2011 during the Presidentship of Prof. A.K. Sharma.</p>					
B)	<u>Publications</u>	<ul style="list-style-type: none"> The reviews published in the Proceedings and Science Letters of the Academy covered the most discussed areas of research from Nanotechnology to Biotechnology; and Material Science to Transformational 	Rs. 34.87 lacs	All volumes were published in time and circulated to the Fellows/	Published on due dates.	The printed materials are the treasure for the researchers and the scientific community of	The special Issues of the publications are to address the science-society's problems; and are much in demand.

		<p>Technologies.</p> <ul style="list-style-type: none"> • Apart from regular publications, the Academy published a vast data on the Nematode Infestations (in two parts), a voluminous work and treasure for the researchers of India & abroad. • A few special Issues were also published 		Members of the Academy, as well as Govt. agencies.		India & abroad. The journals are now indexed by Thompson and other International Indexing Agencies.	
c)	<u>Science Communication Activities</u>	<p>The highlights of activities were Children Science Meet, Summer & Winter Schools, Vacation Training Programmes, Workshops, Vigyan Chaupals, Seminars, National Technology Day, National Science Day and World Environment Day etc. The Academy also encouraged the teachers for out of the class science activities by recognizing their talent and giving away awards to them.</p>	Rs. 66.30 lacs	Very Popular Programmes running by the Academy. Organised throughout the year.	All the programmes held in time.	About 15000 students and teachers were benefitted.	<p>(a) Innovative methods of teaching, development of low cost experimental tools & techniques and organization of several workshops/orientation programmes and refresher courses by NASI</p> <p>(b) Programme on Biodiversity – Several programmes were organized to investigate area specific biodiversity; the Biodiversity Registers have also been prepared for a few regions.</p> <p>(c) Programmes on Library Science & Information – The Academy maintains a very rich library for facilitating the researchers; and also</p>

							organizes regular meetings/workshops to guide the students. (d) On By-pass Desert Cooler – Intensive research and awareness programmes were conducted to minimize mosquitogenic conditions; and reduce the menace of malaria, dengue etc. in and around Allahabad region.
D)	<u>Science Education Programmes in joint collaboration of other National Science Academies</u>	NASI together with other two Science Academies - Indian National Science Academy, New Delhi and Indian Academy of Sciences, Bangalore, is jointly organizing the Summer Research Fellowship under the joint Science Education Panel to provide opportunities to bright under-and post-graduate students and teachers to usefully spend their summer/winter vacations, at a research laboratory for a period of two months. It is worth mentioning that a large number of Fellows of NASI have opted to mentor students and teachers under this programme.	Rs. 136.87 lacs	About thousand students/ teachers participated in the programme	Completed within the stipulated time line.	The students are aspiring to become scientists or taking science in their higher studies.	Very popular programme all over India. Also several refresher courses and lecture workshops organized with this programme.
E)	<u>Annual</u>	During the Annual Session,	Rs 58.84 lacs	The	Completed	Chairs and Scholarships	The symposia were

	<p><u>Session/Symposia/Seminars & Scientific Discussions</u></p>	<p>every year a Symposium is also organized on some recent topic of interest, directly related to science & society. The year 2010 was the International Year of Biodiversity; and the year 2011 was declared by the UNO as the International Year of Forests. In view of this, the Academy decided to organize several programmes. In the year 2010 a National Symposium on "Climate Change" was organized under the President ship of Prof Asis Datta; Prof. M.S. Swaminathan was its Chief Guest and Prof. (Mrs.) Manju Sharma coordinated the event as the Convener. The major topics of this symposium were decided in a meeting headed by Prof. M.G.K. Menon to give an emphasis on the adverse impact of the climate change on the planet earth in general, and the</p>		<p>recommendations are on the website of NASI (www.nasi.nic.in); and also sent to the Govt. bodies for necessary action.</p>	<p>in time.</p>	<p>were instituted to supervise and take up projects and activities in the areas leading to sustainable development.</p>	<p>the need of hour; and the recommendation are being undertaken for implementation by the different concerned agencies.</p>
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		<p>biodiversity, in particular. The recommendations of this symposium were sent to concerned governmental and non-governmental departments; and are also on the website of NASI.</p> <p>Therefore, in consonance with the plan, the Academy further organized a National Symposium on “Sustainable Management of Biodiversity using Science & Technology” on Nov. 24-26, 2011 at Trivandrum; with an aim to propagate the message to take concrete steps for conserving the biodiversity for Sustainable Development.</p> <p>The recommendations have been sent to DST, N Delhi.</p>					
F)	<u>Fellowship/ Membership and recognition/awards</u>	<p>Apart from electing/selecting the Fellows/Members, the Academy also has started a tradition of recognizing the manifold contributions of its</p>	Rs 362.65 lacs	The Fellows/ Members and the Awardees have immensely contributed	The timely reports were received; and printed in the Annual	Manifold achievements of these scientists have been published in the Annual Report,	These Fellowships and Chairs are very prestigious and ICMR/DST/UGC have given full recognition to the

		<p>senior and distinguished scientists by offering them prestigious Chairs.</p> <p>Recently, the ICMR, New Delhi, has jointly instituted the NASI-ICMR Fellowship in the area of Public Health Research. This is the first such joint endeavor of the Academy and ICMR.</p>		<p>to the development of science in general and the research in particular by publishing their results and patenting their findings/ Products.</p>	<p>Report of the Academy.</p>	<p>sent to the DST, N Delhi.</p>	<p>work of these scientists.</p>
G)	<u>Singhania Library</u>	<p>Library services were enriched through digitization of the library, subscribing more books and by providing facilities of storage, reading room, microfilming, citation index etc. Internet facility for educational purpose is also being provided to the students free-of-cost. In the year 2011 the library has been connected to National Knowledge Network (NKN).</p>	Rs 21.15 lacs	<p>Every day the library is attended by about 30-40 researchers/ Student of undergraduate, postgraduate ; and +2 level.</p>	<p>The required updation of the library stock & services was done within the time period.</p>	<p>The library is very popular; and contains precious treasure of books on history of science and also of other branches of science & technology.</p>	<p>It is connected to several institutions of India and abroad.</p>
H)	<u>Local Chapters</u>	<p>The 15 Chapters of the Academy have undertaken a hundreds of activities for the furtherance of the Academy's objectives. Detailed reports of the</p>	Rs. 10.63 lacs	<p>About 10000 students were benefitted.</p>	<p>All the Chapters are undertaking their activities timely.</p>	<p>The achievements are published in their reports.</p>	<p>The Chapters cover almost the entire country and involve the NASI Fellows and Members in organizing the</p>

		Chapters have been included in the Annual Report (published for 2011-12).					science communication/ Education activities.
I)	Other Activities including Establishment/ Maintenance and other collaborative programmes	To serve the science & society	Rs. 346.79 lacs	-----	-----	-----	-----
		Grand Total*:	Rs. 10.47 crores				

Name of the Ministry/Department: THE NATIONAL ACADEMY OF SCIENCES, INDIA, ALLAHABAD

Review of Annual Plan (2013-14)

Statement of Outlays & Outcomes/Targets (2013-14) (As per the Outcome Budget 2013-14) and Up-to date Actual Achievement

SI No.	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2012-13	Quantifiable Deliverables	Process/ Timelines	Achievements w.r.t Col (5) as on	Remarks
1	2	3	4	5	6	7	8
A)	<u>An Establishment of a Magnificent Ganga-gallery</u>	The gallery was inaugurated by Hon'ble Sri Pawan Kumar Bansal , Science & Tech. Minister, Govt. of India on April 15, 2011 during the	Maintenance and upkeep, including projects on Ganga &	The gallery has been completely established; and regularly	Has become a regular activity.	The gallery has been prominently placed on the U P Tourism	NGBRA has praised the efforts of the Academy.

		<p>Presidentship of Prof. A.K. Sharma. The gallery is so popular that it attracted the lacs of pilgrims in the year 2012-13 during the Mahakhumbh; and the Academy was requested by the NGRBA, New Delhi to establish a prototype of the gallery at Sangam Kshetra, Allahabad.</p>	<p>Pollution, and organization of Exhibitions in different parts of the river basin - expenses made in the current year, i.e. 2012-13 to the tune of Rs 55 lacs</p>	<p>being visited by many visitors. The exhibitions were organized thrice in this year.</p>		<p>website of the UP Govt., and also mentioned in the IGNOU Syllabus as well as IIT's Consortium on river Ganges (Gangapedia).</p>	
B)	<u>Publications</u>	<ul style="list-style-type: none"> The reviews published in the Proceedings and Science Letters of the Academy covered the most discussed areas of research from Nanotechnology to Biotechnology; and Material Science to Transformational Technologies. Apart from regular publications, the Academy published a vast data on the Nematode Infestations (Third part), a voluminous work and treasure for the researchers of India & abroad. A few special Issues were also published A book on Malaria 	Rs. 65 lacs	<p>All volumes were published in time and circulated to the Fellows/ Members of the Academy, as well as Govt. agencies.</p>	Published on due dates.	<p>The printed materials are the treasure for the researchers and the scientific community of India & abroad. The journals are now indexed by Thompson and other International Indexing Agencies.</p>	<p>The special Issues of the publications are to address the science-society's problems; and are much in demand.</p>

		<p><u>(Malaria Anusandhan se Rog Samadhan)</u> - compilation of the celebrated research papers of Prof V P Sharma, Former Director, MRC, Delhi, of about 600 pages has also been published in collaboration with the ICMR, N. Delhi.</p> <ul style="list-style-type: none"> All the journals of NASI are now being published on line in collaboration with the Springer India Pvt. Ltd., New Delhi. 					
c)	<u>Science Communication Activities</u>	<p>The highlights of activities were Children Science Meet, Summer & Winter Schools, Vacation Training Programmes, Workshops, Seminars, National Technology Day, National Science Day and World Environment Day etc. The Academy also encouraged the teachers for out of the class science activities by recognizing their talent and giving away awards to them.</p> <p>Not only that, a first of its kind activity was started by the Academy for the young researchers, when a</p>	Rs. 145 lacs	Very Popular Programmes running by the Academy. Organised throughout the year.	All the programmes held in time.	About 25000 students and teachers were benefitted.	<p>(a) Innovative methods of teaching, development of low cost experimental tools & techniques and organization of several workshops/orientation programmes and refresher courses by NASI</p> <p>(b) Programme on Biodiversity – Several programmes were organized to investigate area specific biodiversity; the Biodiversity Registers have also been prepared for a few regions.</p> <p>(c) Programmes on Library Science & Information – The Academy maintains a</p>

		<p>series of workshops on Scientific Paper Writing was organized by the Academy to train them for expressing their views and research findings in an appropriate manner. Recently, the Vth such workshop was held at NASI, Allahabad on Nov.8-10, 2012.</p>					<p>very rich library for facilitating the researchers; and also organizes regular meetings/workshops to guide the students.</p> <p>(d) On By-pass Desert Cooler – Intensive research and awareness programmes were conducted to minimize mosquito-genic conditions; and reduce the menace of malaria, dengue etc. in and around Allahabad region.</p>
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D)	<p align="center"><u>Science Education Programmes in joint collaboration of other National Science Academies</u></p>	<p>NASI together with other two Science Academies - Indian National Science Academy, New Delhi and Indian Academy of Sciences, Bangalore, is jointly organizing the Summer Research Fellowship under the joint Science Education Panel to provide opportunities to bright under-and post-graduate students and teachers to usefully spend their summer/winter vacations, at a research laboratory for a period of two months. It is worth mentioning that a large number of Fellows of NASI have opted to mentor students and teachers under this programme.</p>	<p align="center">Rs. 150 lacs</p>	<p>About thousand students/ teachers participated in the programme</p>	<p>Completed within the stipulated time line.</p>	<p>The students are aspiring to become scientists or taking science in their higher studies.</p>	<p>Very popular programme all over India. Also several refresher courses and lecture workshops organized with this programme.</p>
E)	<p align="center"><u>Annual Session/Symposia/Seminars & Scientific Discussions</u></p>	<p>During the Annual Session, every year a Symposium is also organized on some recent topic of interest, directly related to science & society. The Academy organized a Symposium on Nano-science & technology for mankind, at BHU, Varanasi, during its 82nd Annual Session on November 28- December 01, 2012. The convener of this symposium was Prof. Ashok Misra, former Director, IIT Bombay. The symposium was addressed by several world famous scientists on Nano-science & technology.</p>	<p align="center">Rs 85 lacs</p>	<p>The recommendations are to be uploaded on the website of NASI (www.nasi.nic.in); and will also be sent to the Govt. bodies.</p>	<p>Completed in time.</p>	<p>Chairs and Scholarships will be instituted to supervise and take up projects and activities in the areas related to nano-science & technology..</p>	<p>The symposium was the need of hour; and the recommendation are being sent for implementation by the different concerned agencies.</p>

F)	<p><u>Fellowship/ Membership and recognition/awards</u></p>	<p>Apart from electing/selecting the Fellows/Members, the Academy also has started a tradition of recognizing the manifold contributions of its senior and distinguished scientists by offering them prestigious Chairs. Recently, the ICMR, New Delhi, has jointly instituted the NASI-ICMR Fellowship in the area of Public Health Research. This is the first such joint endeavor of the Academy and ICMR. In the year 2012, Distinguished Woman Scientist Chair has been instituted with the support of the DST, New Delhi.</p>	<p>Rs 510 lacs</p>	<p>The Fellows/ Members and the Awardees have immensely contributed to the development of science in general and the research in particular by publishing their results and patenting their findings/ Products.</p>	<p>The timely reports were received; and printed in the Annual Report of the Academy.</p>	<p>Manifold achievements of these scientists has been published in the Annual Report, sent to the DST, N Delhi.</p>	<p>These Fellowships and Chairs are very prestigious and ICMR/DST/UGC have given full recognition to the work of these scientists.</p>
G)	<p><u>Singhania Library</u></p>	<p>Library services were enriched through digitization of the library, subscribing more books and by providing facilities of storage, reading room, microfilming, citation index etc. Internet facility for educational purpose is also being provided to the students free-of-cost. In the year 2011 the library has been connected to National Knowledge Network (NKN).</p>	<p>Rs 45 lacs</p>	<p>Every day the library is attended by about 30-40 researchers/ Student of undergraduate, postgraduate ; and +2</p>	<p>The required updation of the library stock & services are to be done within the time period.</p>	<p>The library is very popular; and contains precious treasure of books on history of science and also of other branches of science &</p>	<p>It is connected to several institutions of India and abroad.</p>

				level.		technology.	
H)	<u>Local Chapters</u>	The 17 Chapters of the Academy have undertaken a hundreds of activities for the furtherance of the Academy's objectives. Detailed reports of the Chapters has been included in the Annual Report (published for 2012-13).	Rs. 30 lacs	About 15000 students were benefitted.	All the Chapters are undertaking their activities timely.	The achievements are published in their reports.	The Chapters cover almost the entire country and involve the NASI Fellows and Members in organizing the science communication/ Education activities.
I)	Other Activities including NASI Initiatives ; and Establishment/ Maintenance etc.	To serve the science & society with many new programmes in the Year of Science	Rs.2415.10 lacs	-----	-----	-----	The Year of Science Programmes have been started; as well as another gallery on Brahmaputra is also to be set-up under the programme for dissemination of scientific knowledge.
		Grand Total*:	Rs. 35.00 Crores				

Name of the Ministry/Department: THE NATIONAL ACADEMY OF SCIENCES, INDIA, ALLAHABAD

Annual Plan (2014-15)

Statement of Outlays & Outcomes/Targets (2014-15)

SI No.	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2013-14	Quantifiable Deliverables	Process/ Timelines	Achievements w.r.t Col (5) as on	Remarks
1	2	3	4	5	6	7	8
A)	<u>The Establishment of a Magnificent Brahmaputra-gallery; and maintenance of the Ganga-gallery</u>	After successfully establishing the Ganga-gallery, the Council of the Academy decided to establish another gallery on the rivers at Assam, i.e. Brahmaputra gallery. The process has already been started; and hopefully the work be completed by the end of the financial year 2013-14.	Rs one crore has been spent so far in the process of establishing the Brahmaputra gallery; and the maintenance and upkeep, including projects on Ganga & Pollution, and organization of Exhibitions in different parts of the river basin, further	The Brahmaputra-gallery is being established; the exhibitions will be organized at several places in this year.	Has to become a regular activity.	The Ganga-gallery has been prominently placed on the U P Tourism website of the UP Govt., and also mentioned in the IGNOU Syllabus as well as IIT's Consortium on river Ganges (Gangapedia).	NGBRA has praised the efforts of the Academy.

			expenses to be made in the year, i.e. 2013-14 are to the tune of Rs one crore sixty lacs ; therefore, the total comes to Rs. 2.60 crores.				
B)	<u>Publications</u>	<ul style="list-style-type: none"> The reviews are being published in the Proceedings and Science Letters of the Academy covering the most discussed areas of research from Nanotechnology to Biotechnology; and Material Science to Transformational Technologies. A few special Issues will also be published A book on Dengue will be published. All the journals of NASI are being published on line in collaboration with the Springer India Pvt. Ltd., New Delhi. 	Rs. 70 lacs	All volumes will be published in time and circulated to the Fellows/ Members of the Academy, as well as Govt. agencies.	To be Published on due dates.	The printed materials are the treasure for the researchers and the scientific community of India & abroad. The journals are indexed by Thompson and other International Indexing Agencies.	The special Issues of the publications are to address the science-society's problems.
C)	<u>Science Communication Activities</u>	The highlights of activities will be Children Science	Rs. 170 lacs	Very Popular Programmes	All the programmes	About 35000 students and	(a)Innovative methods of teaching, development of low

		<p>Meet, Summer & Winter Schools, Vacation Training Programmes, Workshops, Seminars, National Technology Day, National Science Day and World Environment Day etc. The Academy also encourages the teachers for out of the class science activities by recognizing their talent and giving away awards to them.</p> <p>Not only that, a series of workshops on Scientific Paper Writing will continue as per previous years to train the researchers for expressing their views and research findings in an appropriate manner. The next workshop is to be held at Udaipur, Rajasthan.</p>		<p>running by the Academy, organised throughout the year.</p>	<p>will be held in time.</p>	<p>teachers will be benefitted.</p>	<p>cost experimental tools & techniques and organization of several workshops/orientation programmes and refresher courses by NASI</p> <p>(b) Programme on Biodiversity – Several programmes will be organized to investigate area specific biodiversity; the Biodiversity Registers are also to be prepared for a few regions.</p> <p>(c) Programmes on Library Science & Information – The Academy maintains a very rich library for facilitating the researchers; and also organizes regular meetings/workshops to guide the students.</p>
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D)	<p align="center"><u>Science Education Programmes in joint collaboration of other National Science Academies</u></p>	<p>NASI together with other two Science Academies - Indian National Science Academy, New Delhi and Indian Academy of Sciences, Bangalore, will jointly organize the Summer Research Fellowship under the joint Science Education Panel to provide opportunities to bright under-and post-graduate students and teachers to usefully spend their summer/winter vacations, at a research laboratory for a period of two months.</p>	<p align="center">Funds are to be spent by the IASc, Bangalore</p>	<p>About thousand students/ teachers may participate in the programme</p>	<p>To be Completed within the stipulated time line.</p>	<p>The students will be enthused to become scientists or to take science in their higher studies.</p>	<p>Very popular programme all over India. Also several refresher courses and lecture workshops would be organized with this programme.</p>
E)	<p align="center"><u>Annual Session/Symposia/Seminars & Scientific Discussions</u></p>	<p>During the Annual Session, every year a Symposium is also organized on some recent topic of interest, directly related to science & society. This year a Symposium on Space for Human Welfare was organized with Dr K Radhakrishnan, Chairman, ISRO, as the Chief Guest.</p>	<p align="center">Rs 95 lacs</p>	<p>The recommendations will be uploaded on the website of NASI.</p>	<p>held in time.</p>	<p>Chairs and Scholarships will be instituted to supervise and take up projects and activities in the areas related to the symposium.</p>	<p>The symposium was focused on Space technology.</p>
F)	<p align="center"><u>Fellowship/ Membership and recognition/awards</u></p>	<p>Apart from electing/selecting the Fellows/Members, the Academy also has started a tradition of recognizing the</p>	<p align="center">Rs 586 lacs</p>	<p>The Fellows/ Members and the Awardees immensely contribute to</p>	<p>Their reports will be printed in the Annual Report of</p>	<p>Manifold achievements of these scientists will be published in the Annual</p>	<p>The existing Fellowships and Chairs are very prestigious and DBT/ICMR/DST</p>

		<p>manifold contributions of its senior and distinguished scientists by offering them prestigious Chairs and Fellowships.</p> <p>The new Chairs/Fellowships/Awards will be instituted.</p>		<p>the development of science in general and the research in particular by publishing their results and patenting their findings/ Products.</p>	<p>the Academy.</p>	<p>Report, to be sent to the DST, N Delhi.</p>	<p>/UGC, Govt. of India have given full recognition to the work of the scientists/fellows.</p>
G)	<u>Singhania Library</u>	<p>Library services will be enriched through subscribing more books and by providing facilities of storage, reading room, microfilming, citation index etc. Internet facility for educational purpose is also being provided to the students free-of-cost. In the year 2011 the library has been connected to National Knowledge Network (NKN).</p>	Rs 50 lacs	<p>Every day the library is attended by about 30-40 researchers/ Student of undergraduate, postgraduate ; and +2 level.</p>	<p>The required updation of the library stock & services will be done within the time period.</p>	<p>The library is very popular; and contains precious treasure of books on history of science and also of other branches of science & technology.</p>	<p>It is connected to several institutions of India and abroad.</p>
H)	<u>Local Chapters</u>	<p>The 18 Chapters of the Academy will undertake many activities for the furtherance of the Academy's objectives. Detailed reports of the</p>	Rs. 40 lacs	<p>About 20000 students will be benefitted.</p>	<p>All the Chapters will undertake their activities timely.</p>	<p>The achievements will be published in their reports.</p>	<p>The Chapters cover almost the entire country and involve the NASI Fellows and Members in organizing the</p>

		Chapters will be included in the Annual Report (to be published for 2013-14).					science communication/ Education activities.
I)	Other Activities including NASI Initiatives ; and Establishment/ Maintenance etc.	To serve the science & society with many new programmes in the Year of Science	Rs.2395 lacs	-----	-----	-----	The Year of Science Programmes have been started; as well as a Science Park (Museum) is also to be set-up under the programme for dissemination of scientific knowledge.
		Grand Total*:	Rs. 36.66 Crores				