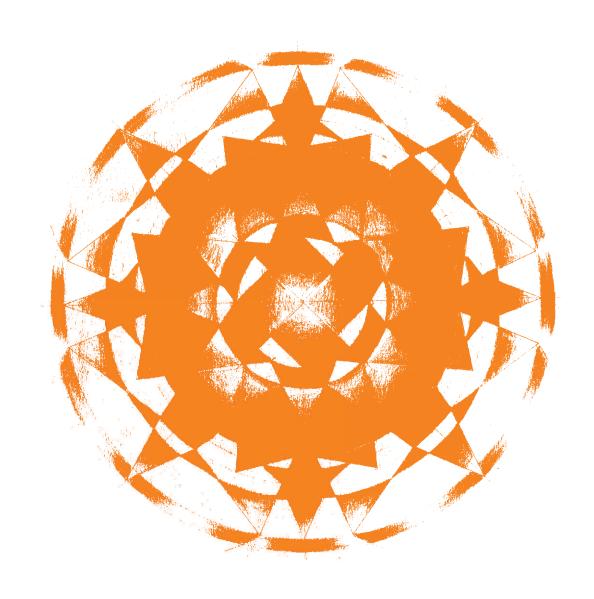
अतम् Ritam

Volume 4 • Issue 1 • August 2006



A Journal of Material and Spiritual Researches in Auroville

Sri Aurobindo International Institute for Educational Research

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Editor

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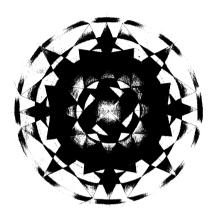
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Volume 4 • Issue 1 • August 2006



A Journal of Material and Spiritual Researches in Auroville

Sri Aurobindo International Instituteof Educational Research

RITAM

A bi-annual journal of material and spiritual researches in Auroville

Our aim:

- This is a journal under SAIIER connecting the various units under its umbrella with the focus on education and other related areas of research.
- The purpose is to create a space where we express and share our work in Auroville and also invite others to share their perceptions with a view to look at where we stand with reference to the ideal.
- It will publish articles, interviews etc. which are relevant to the Charter of Auroville, both from people in Auroville as well as those from elsewhere.
- This journal is for both Aurovilians as well as others who are looking to Auroville for pioneering work in many fields.
- The goal is to understand better the spirit of Auroville and in that context what we are doing and what further we can do.

স্বন্দ RITAM

Volume 4 Issue 1 AUGUST 2006

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Prayers and Meditations

The Mother

To be at once a passive and perfectly pure mirror, turned simultaneously without and within, to the results of the manifestation and the sources of this manifestation, so that the consequences may be placed before the guiding will, and to be also the realising activity of that will, this, more or less, is what a human being ought to be ... To combine these two attitudes of passive receptivity and realising activity is precisely the most difficult of all things. And this is what Thou expectest of us, O Lord, and as Thou dost expect it of us, there is no doubt that Thou wilt give us the means of realising it.

For what must be will be, more splendidly yet than we can imagine.

Oh, may Thy love grow wider and wider in the manifestation, ever more sublime, ever deeper, ever vaster...

June 21, 1914

Conservation and Progress

Sri Aurobindo

Mankind thinks naturally in extremes or else reconciles by a patchwork and compromise. Whether he makes a fetish of moderation or surrenders himself to the enthusiasm of the single idea, the human being misses always truth of vision and the right pitch of action because instead of seeing, feeling and becoming in obedience to his nature like other animate existences he tries always to measure things by a standard he has set up in his intelligence. But it is the character of his intelligence that it finds it an easy task to distinguish and separate but is clumsy in combining. When it combines, it tends to artificialise and falsify. It feels at ease in pursuing a single idea to its logical consequences and in viewing things from a single standpoint; but to harmonise different ideas in action and to view the facts from different standpoints is contrary to its native impulse; therefore it does that badly, with an ill grace and without mastery. Oftenest it makes an incongruous patchwork rather than a harmony. The human mind is strong and swift in analysis; it synthesises with labour, and imperfectly and does not feel at home in its synthesis. It divides, opposes and, placed between the oppositions it creates, becomes an eager partisan of one side or another but to think wisely and impartially and with a certain totality is irksome and disgusting to the normal human being.

All human action as all human thought suffers from these disabilities. For it is seduced by a trenchant idea which it follows without proper attention to collateral issues, to necessary companion ideas to the contrary forces in operation, or else it regards these merely as enemies, brands them as pure falsehood and evil and strives with more or less violence to crush them out of existence. Then it sees other ideas which it attempts to realise in turn, either adding them to its past notions and

possessions or else rejecting these entirely for the new light; it makes a fresh war and a new clearance and denies its past work in the interest of a future attainment. But it has also its repentances, its returns, its recall and re-throning of banished gods and even of lifeless ghosts and phantoms to which it gives a temporary and false appearance of life. And on the way it has continually its doubts, scruples, hesitations, its pretentious assumptions of a sage moderation and a gradual and cautious advance. But human moderation is usually a wiseacre and a botcher; it sews a patch of new velvet on old fustian or of new fustian on old velvet and admires its deplorable handiwork. And its cautious advance means an accumulation of shams, fictions and dead conventions till the burden of falsehood becomes too great for life to bear and a violent revolution is necessary to deliver the soul of humanity out of the immobilising cerèments of the past. Such is the type of our progress; it is the advance of an ignorant and purblind but always light-attracted spirit, a being half-animal, half-god, stumbling forward through the bewildering jungle of its own errors.

This characteristic of human mentality shows itself in the opposition we create between conservation and progress. Nothing in the universe can really stand still because everything there is a mould of Time and the very essence of Time is change by a movement forward. It is true that the world's movement is not in a straight line; there are cycles, there are spirals; but still it circles, not round the same point always, but round an ever advancing centre, and therefore it never returns exactly upon its old path and never goes really backward. As for standing still, it is an impossibility, a delusion, a fiction. Only the spirit is stable; the soul and body of things are in eternal motion. And in this motion

there are the three determining powers of the past, future and present, – the present a horizontal and constantly shifting line without breadth between a vast realised infinity that both holds back and impels and a vast unrealised infinity that both repels and attracts.

The past is both a drag and a force for progress. It is all that has created the present and a great part of the force that is creating the future. For the past is not dead; its forms are gone and had to go. otherwise the present would not have come into being: but its soul, its power, its essence lives veiled in the present and ever-accumulating, growing, deepening will live on in the future. Every human being holds in and behind him all the past of his own race of humanity and of himself; these three things determine his starting point and pursue him through his life's progress. It is in the force of this past, in the strength which its huge conservation give to him that he confronts the unillumined abysses of the future and plunges forward into the depths of its unrealised infinities. But also it is a drag, partly because man afraid of the unknown clings to the old forms of which he is sure, the old foundations which feel so safe under his feet, the old props round which so many of his attachments and associations cast their tenacious tendrils, but also partly because the forces of the past keep their careful hold on him so as to restrain him in his uncertain course and prevent the progress from becoming a precipitation.

The future repels us even while it irresistibly attracts. The repulsion lies partly in our own natural recoil from the unknown, because every step into this unknown is a wager between life and death; every decision we make may mean either the destruction or the greater fulfilment of what we now are, of the name and form to which we are attached. But also it lies in the future itself; for there, governing that future, there are not only powers which call us to fulfil them and attract us with an irresistible force but other powers which have to be conquered and do not desire to yield themselves. The future is a sphinx with two minds, an energy which offers itself and

denies, gives itself and resists, seeks to enthrone us and seeks to slay. But the conquest has to be attempted, the wager has to be accepted. We have to face the future's offer of death as well as its offer of life, and it need not alarm, for it is by constant death to our old names and forms that we shall live most vitally in greater and newer forms and names. Go on we must; for if we do not, Time itself will force us forward in spite of our fancied immobility. And this is the most pitiable and dangerous movement of all. For what can be more pitiable than to be borne helplessly forward clinging to the old that disintegrates in spite of our efforts and shrieking frantically to the dead ghosts and dissolving fragments of the past to save us alive? And what can be more dangerous than to impose immobility on that which is in its nature mobile? This means an increasing and horrible rottenness; it means an attempt to persist on as a putrid and stinking corpse instead of a living and self-renewing energetic creature. The greatest spirits are therefore those who have no fear of the future who accept its challenge and its wager; they have that sublime trust in the God or Power that guides the world, that high audacity of the human soul to wrestle with the infinite and realise the impossible, that wise and warrior confidence; in its ultimate destiny which marks the Avatars prophets and great innovators and renovators.

If we consider carefully we shall see that the past is indeed a huge force of conservation, but of conservation that is not immobile, that on the contrary offers itself as material for change and new realisation; that the present is the constant change and new actual realisation which the past desires and compels; and that the future is that force of new realisation not yet actual towards which the past was moving and for the sake of which it lived Then we perceive that there is no real opposition between these three; we see that they are part of a single movement; a sort of Trinity of Vishnu-Brahma-Maheshwara fulfilling by an Inseparable action the one Deity. Yet the human mind in its mania of division and opposition

seeks to set them at strife and ranges humanity into various camps, the partisans of the past, the partisans of the present the partisans of the future; the partisans of all sorts of compromises between the three Forces. Nature makes good use of the struggle between these partisans and her method is necessarily in our present state of passionate ignorance and egoistic obstinacy; but nonetheless is it from the point of view of a higher knowledge a pitiably ignorant struggle.

The partisans of the future call themselves the party of progress the children of light and denounce the past as ignorant, evil, a mass of errors and abuses; their view alone has the monopoly of the light, the truth, the good – a light, good and truth which will equally be denounced as error and evil by succeeding generations The partisans of the present look with horror upon all progress an impious and abominable plunge into error and evil and degeneration and ruin; for them the present is the culmination of humanity, – as previous "present" times were for all the preceding generations and as the future which they abhor will be for these unprogressive souls if they should then reincarnate; they will then defend it with the same passion and asperity against another future as they now attack it in the interests of the present. The partisans of the past are of two kinds. The first admit the defects of the present but support it in so far as it still cherishes the principles of the high, perfect, faultless, adorable past, that golden age of the race or community, and because even if somewhat degenerate, its forms are a bulwark against the impiety of progress; if they admit any change, it is in the direction of the past that they seek it. A second kind condemn the present root and branch as degenerate, hateful, horrible, vicious, accursed; they erect a past form as the hope of a humanity returning to the wisdom of its forefathers. And to such quarrels of children the intellectuals and the leaders of thought and faith lend the power of the specious or moving word and the striking idea and the emotional fervour or religious ardour which they conceive

to be the very voice and light and force of Truth itself in its utter self-revelation.

The true thinker can dispense with the éclat which attaches to the leader of partisans. He will strive to see this great divine movement as a whole, to know in its large lines the divine intention and goal in it with out seeking to fix arbitrarily its details; he will strive to understand the greatness and profound meaning of the past without attaching himself to its forms, for he knows that forms must change and only the formless endures and that the past can never be repeated, but only its essence preserved, its power, its soul of good and its massed impulse towards a greater self-fulfilment; he will accept the actual realisations of the present as a stage nothing more, keenly appreciating its defects, self-satisfied errors, presumptuous pretensions because these are the chief enemies of progress, but not ignoring the truth and good that it has gained; and he will sound the future to understand what the Divine in it is seeking to realise, not only at the present moment, not only in the next generation, but beyond, and for that he will speak, strive, if need be battle, since battle is the method still used by Nature in humanity, even when all the while he knows that there is more yet beyond beside which, when it comes to light the truth he has seized will seem erroneous and limited. Therefore he will act without presumption and egoism, knowing that his own errors and those which he combats are alike necessary forces in that labour and movement of human life towards the growing Truth and Good by which there increases shadowily the figure of a far-off divine Ideal.

> The Supramental Manifestation on Earth and Other Writings

Rhythms of The Human Cycle applied to Auroville

Joseba Martinez

The purpose of this work is to apply to Auroville the psychological methodology that Sri Aurobindo has described in his social philosophy for the investigation on the evolution of humankind, especially in his work titled "The Human Cycle." This system of analysis is a good intellectual tool to discover and try to understand what are the inner or psychological cycles that Nature follows in its process of development of human societies, what man has been in his physical and vital evolution, what can be his mental and spiritual future destiny, what is his place and what is the meaning and purpose of the entire process. Although this analysis can be applied universally to any given society, the process of the evolution of each one of the cycles, the time of manifestation and flourishing, the process of assimilation of each one of them, will differ necessarily from one society to another. This aspect, the particularity of the process followed by every different society, can be of special relevance when we take into consideration the exceptional characteristics of the society of Auroville. The first of these characteristics is that here most of the people are volunteers that have joined consciously in order to participate in an experiment where explicit aims and objectives are meant to accelerate the ordinary process of evolution, through a concentrated effort made at individual and collective levels in a new process of psychological transformation that Sri Aurobindo called Integral Yoga. The ultimate goal is the achievement of a new kind of society, a society spiritually transformed or a Gnostic Society. Therefore, it can be expected that in this context these cycles will evolve and be expressed in a different manner and with a different swiftness than in any other society.

The Symbolic: This is a foundational period, predominantly religious and spiritual. A strong intuitive mind is applied to institutions, customs, ideas and other forms of culture. The other elements, psychological, ethical, economic, are there but subordinated to the spiritual and religious idea.

The predominant character of this period, its inspiration and guidelines were given to Auroville directly by the Mother. Unfortunately, this important period of her life for Auroville was extremely short. The Mother started the process of defining Auroville around 1965. Therefore, if we take this year as the starting point and until her passing away in 1973, there were practically only eight years for the establishment of this foundational base. It is necessary to consider that the age of the Mother was another handicap, at that time she was 90 years old and in very delicate health that prevented to a certain extent the intense external efforts necessary for this kind of period. Guidelines were given for the main aspects of the practical life and organization, but in many cases these were ideals that belonged to the future and were very difficult to fulfill in the present state of consciousness of humankind. Only during this short period whenever these guidelines met obstacles for their implementation, was it possible to get direct help and advice from the Mother to overcome these difficulties.

Another possibility for the establishment of a longer foundational period could have been to develop a closer relationship with the Ashram and to take advantage of its experience. Unfortunately, only one year after her passing away, that is in 1974, Auroville had to face a very difficult period, this was the moment of the conflict between the Sri Aurobindo Society, the Society that was acting as the project holder for the development of Auroville, and the majority of the residents of Auroville. When this period was over, one of the consequences was that the normal and fluent communication which had existed earlier between the Sri Aurobindo Ashram and Auroville had been seriously harmed.

Another important characteristic of this period was that at the moment of launching the project, the international media gave wide coverage to the event and this attracted a number of young people from different countries, many of them from France. It is important

to note that these youth were coming strongly influenced by the ideas of that period, the sixties, particularly after the cultural revolution of May 1968 in France. Many of their main ideas – the spirit of social revolt, antihierarchical attitude, individual freedom, egalitarianism, etc – were going to play a crucial role in the resolution of many of the issues involved in the early years of the development of Auroville. At the same time, these seeds that were planted in the cultural ground of Auroville could be seen as a very significant factor and an important contribution to the future, in an attempt to find a cultural synthesis between East and West, and this is one of the most essential aspects of the ideals that Auroville needs to achieve.

The Typal or Conventional: This typal stage creates the great social ideals which remain impressed upon the human mind even when the stage itself is passed. There is an increasing tendency to intellectualize life, this period culminates in the Conventional, in which the rigidity of social ideas, norms, and conventions is established. The chief characteristic of this age is formalization in the name of stabilization and preservation: systems of rigid grades and hierarchies are erected and life is more in its outer structure than in its inner Spirit.

This period could be considered as from the passing away of the Mother in 1973 until now. During this time Auroville has dedicated many of its efforts to its self-organization as a collective body; there is an attempt to regulate the different aspects of its collective life and for each of the important areas there is a group that tries to take care of it, and normally has prepared a set of rules and policies that try to administer it in the best possible way. A kind of 'regular' process has been established, in which diverse proposals and groups created to implement them change very fast, every two or three years maximum, and one has the impression of being immersed in a very fluid and flexible structure, in which nothing can become fossilized. But many times this is only a superficial impression, since looking at these processes from a longer perspective, it can be perceived that these changes affect only the surface, and it is frequent to find situations stagnating in spite of all these supposed changes.

The approval in 1988 of The Auroville Foundation Act by the Indian Parliament was the other important event during this period. The relevance of this Act can be seen at two levels: first, it can provide Auroville with

the necessary official recognition and legal frame to interact with the Indian administration on all levels and channelize various initiatives; second, this Act has provided the Indian Government with the possibility to intervene directly in Auroville's affairs. This Act also introduces the possibility of establishing and formalizing conventional processes at some levels. For instance, in my opinion, this is happening in the Governing Board, a body which is nominated by the Central Government and follows customary and common procedures. If one of the important aspects of the Auroville experiment is to research and to discover new and innovative forms of self-government, the present Auroville Foundation presents some aspects which may need to be amended in the future, in order to foster this research and discovery.

I would like to point out that the present organizational set up is quite unsuitable to realize the ultimate aims of becoming a spiritualized society. There is a contradiction between trying to live within, in contact with the inner Spirit, and from there to try to mould external structures, and a mental attempt to organize and regulate the outer world, that is the predominant character of the present organization. This contradiction can only be solved when some individuals or a group of individuals have reached a substantial inner development, and have been able to effectively transmit their knowledge to the collectivity. Meanwhile these kinds of temporary organizational arrangements can have their own utility in order to facilitate the necessary transitional period between the present level of human consciousness, and the future realizations that we as a collectivity try to manifest.

There are some inevitable dangers in this situation, one of them would be the growing importance of conventionalism in all these structures, the triumph of the external and practical form over the spirit and the subsequent rigidity and stagnation of the entire organization, after all this has been the normal process of evolution followed by ordinary societies. Auroville is aware of these dangers and hopefully will do what is necessary to prevent them.

These are some of the reasons that make me believe that this period in Auroville is probably going to be much shorter in its evolution, never will it have the unquestioned acceptance and general legitimacy that one can find in other experiences and it will be marked by a general sense of temporality and distrust.

The Individualistic: This is a very skeptical, critical and questioning age, it is an attempt to rediscover the truths of life and thought and action that have been distorted in the conventional period.

Up to now, it is not possible to find any generalized expression of the characteristic attitudes of this period in the context of Auroville. Probably the main reason for this is that the experiment is still in its initial phases of development, and not sufficient time has been given to any of its organizational forms to settle and become formalized.

But it is possible to find some specific forms that this individualistic behavior has adopted; this can be seen more clearly in the interrelation between individuals and the different aspects of collective life. In the present organization there are rules and regulations that reflect a certain degree of arbitrariness and inappropriateness with regard to the real needs of the collectivity, and the dissatisfaction caused by these deficiencies is being expressed in various attitudes.

One of them is the lack of participation in the collective process. Often, since the number of people involved in taking decisions is not substantial or sufficiently representative, the decisions do not have enough validity to be implemented.

Another expression, more common in the financial area, is that given the complexity and the number of difficulties experienced in the past to find an appropriate system for a collective economy, many people finally took recourse to finding their own individual solutions, which are less difficult and less demanding, and as a result the implementation of a true system is postponed, and to the unresolved problems is added the weight of inadequate solutions put in practice by individuals.

Another of these expressions, which takes more the form of a general trend of thinking, could be called pluralistic relativism which very much influences the present reality. Its main characteristic is the strong subjectivism that means that individual preferences or interpretations impose themselves over an objective truth, what is true for you is not necessarily a truth for me, everything is considered a matter of interpretation, and in that sense there are no truths that can bind the collectivity in a common exercise. The main problem with this attitude is its proportion, since beyond an acceptable point, this attitude can become a

psychologically corrosive acid able to dissolve the accepted truths established in the Symbolic age and prevent collective action.

The Subjective: The subjective stage of human development is the critical point at which, having moved forwards from the conventional stage, the human being starts to see deeper, sese what is below the surface and tries to act from within. It is a step towards self-knowledge and towards living from the self. Everything depends on how this self-research is taken, to what kind of subjectivity we arrive and how far we go in this self-knowledge; because here the errors can have big dangers while right seeking fruitful results. There is a false as well a true subjectivism.

Individual seeking for the truth of one's being can be done safely if two great psychological truths are respected, the first is that the ego is not the real self and therefore the fulfillment of the individual does not mean the satisfaction of his egoistic intellect, vital and physical desires but the development of the divine individuality in him to his utmost capacities of wisdom, love and powers of realization, something that the evolution has been secretly preparing to emerge one day in everyone. The second psychic truth is that the individual is not only himself, but he is in his life and being all others simultaneously, there is a secret solidarity between the individual and the collectivity and only by admitting and realizing his unity with all the others can the individual entirely fulfill his true self-being. Apsychic self-knowledge tells us that there are in our being many frontal, apparent or representative selves but only one which is entirely real, although secret in our deepest self. To mistake the apparent self for the real one is a very common error, the root of many others and the cause of many sufferings and blunders.

There is then a true and a false subjectivism, and this carries some important implications for the analysis of the individual and the life of societies and nations. In the context of Auroville, my assumption is that the majority of its members are psychologically living, in one way or another, in this age, although most are probably still in the phase of a "false subjectivism". This assumption is based on two things, the first is that even if it is possible to recognize in many of the Auroville residents an authentic attempt towards finding the truth of their beings, presently, there is evidently the lack of a leading person or group with the required spiritual

consciousness to guide the entire process. The rest of the residents probably are still in the individualistic age, looking for their "partial and external freedom", without recognizing that first, this freedom and liberty are only the incomplete and external aspects of a much deeper and wider reality, and second, that this is an attitude that is going to reaffirm the false ego, instead of seeking for one that is oriented towards putting an end to it.

If this is the outline that can be depicted after thirtyeight years of experience, some observers could comment that from the spiritual point of view, apparently not much advance has been made in a project whose explicit aims are precisely those. To this it could be replied that it should not be forgotten that first, the project was started with people with no experience in Yoga or spiritual paths in most of the cases, second that the help which could have been received from the Ashram in this field was cut very soon, and third that the process of learning normally takes a long time and always faces many difficulties.

For these reasons, looking to all the circumstances involved in a process of this complexity, my opinion is that it is almost a miracle, or maybe I should say just a miracle, that a project of the magnitude and significance of Auroville, has managed to survive the large number of difficult challenges that had to be faced in a short time and is still alive and confident in the final achievement of the ideals for which it was created.

There are two other important questions that I would like to clarify, the first one is the direction that Auroville needs to take at present if it still wants to fulfill its original aims, and the second is the next necessary steps to be taken to reach the objectives mentioned. The direction that Auroville must take in these circumstances is, in my opinion, to deepen and enhance the true subjective period that has already started, even if this is done only by a small minority of its members. All the present problems of Auroville, all the divisions, conflicts, weaknesses, have this at their base: the insufficient development of this Subjective Age. At the same time, all the unrealized potentialities are also contained at this point, latent and waiting for the hour when the external conditions and time becomes favorable for manifestation.

With relation to the second question, there is a very interesting section in the chapter "Conditions for the

Coming of a Spiritual Age". One of its propositions is that if the spiritual change is to be effected, it must unite two conditions, there must be the individual or individuals that have embodied in themselves a higher spiritual consciousness, and there must be at the same time a mass, a society, the possibility of a group soul which is capable of receiving and assimilating this spiritual consciousness. Sri Aurobindo ends by saying that such a simultaneity has never happened in the past but must happen one day. I think that the entire endeavor of Auroville revolves around the fulfillment of these two conditions. But, what will be the strategy that the Spirit behind all the processes of Auroville is going to apply for its realization? The first condition clearly has not been achieved if we look at the present situation, but perhaps the strategy followed all these years, has been devoted to slowly collecting the different ingredients and the basic components that are necessary for the fulfillment of the second condition.

Meanwhile, what is needed at this precise moment is to face our insufficiencies as well as our highest hopes, to identify and know both of them in depth, to offer them to the Divine concealed in all of us for transformation, while continuing our daily work with an indomitable spirit and an unshakeable faith in our destiny, knowing that the force of this faith and the power of our actions are the necessary conditions, to create the most inviting environment to attract the forces of the future necessary for the realization of the once unattainable Auroville's utopias. The essence of this spirit can be summarized in the following lines:

Cherish the might of the spirit
The nobility of the ideal
The grandeur of the dream
The spirit will create the material it needs
The ideal will bring the real to its body and selfexpression
The dream is the stuff out of which the waking world

The dream is the stuff out of which the waking world will be created

Joseba Martinez is a mechanical engineer originally from Spain living in Auroville since 1995. He is currently member of Auroville Planning and Development Council as well as the Economy Group and project holder of 'Sangamam' Auroworkers village model. He is also preparing a paper on the philosophical aspects of Sri Aurobindo's epic poem 'Savitri'.

Providing good conservation conditions in Auroville for a unique collection of oil paintings

Shraddhavan

In June 2001, a very special art collection was entrusted to Savitri Bhavan. These were the 472 paintings made by Huta from 1961 to 1965, illustrating the whole of Sri Aurobindo's revelatory epic *Savitri*, at the Mother's wish and following her instructions, guidance and inspiration. These paintings were exhibited in the Ashram in February 1967. After that they were stored in cupboards designed by the Mother in a room reserved for them in Golconde.

In 1995 the management of Golconde requested Huta to remove the paintings. She took them to her apartment, and from there they were moved to Auroville in 2001. The intention was that as soon as possible a gallery would be provided at Savitri Bhavan where the paintings could all be on permanent display in sequence. We are in the process of creating this gallery.

Thinking of having all the paintings on permanent display and open to the public, we had to think about how they could be properly protected – from dust, insects and geckos, from humidity, from possible human interference, and from harmful light and temperature variations.

The first thought was to design protective cabinets for displaying the paintings. Research for this was undertaken by our architect, Helmut, in the spring of 2005, using the internet, and visiting outstanding galleries and museums in Europe. On the basis of his research, a prototype cabinet was designed under his guidance. This prototype was built in the autumn of 2005, using a grant provided for the purpose by the Foundation for World Education, U.S.A.

Ever since 2001, when the paintings came to Auroville, Huta had been urging us to get new

films of the paintings made, to replace the ones prepared earlier by Michel Klosterman of Filmaur, Germany. It became possible to make a start on this project in the summer of 2005 with the help of Manohar (Luigi F.) a newcomer to Auroville who had the necessary skills. We showed Manohar the materials available for preparing the films: digital scans of slides of the paintings, and the soundtrack provided by Huta of the Mother's reading of the relevant passages from the poem. After seeing the materials he strongly recommended that new digital photographs should be taken of the paintings, and that the films should be prepared from these.

It had been wished to make new digital photographs of the paintings for some time, but now suddenly with Manohar's help we found the right person to take up the work: another Italian Newcomer to Auroville, Giorgio Molinari, a highly experienced professional photographer who was willing to help us. Together Manohar and Giorgio set up a photographic studio in the room where the paintings were being stored, and the work was completed in a very short time. These photographs are now being used by Manohar for making the films as requested by Huta. The first three have already been prepared and shown at Savitri Bhavan, in August 2005, February 2006 and April 2006. Moreover Giorgio is gradually making archival quality prints in the actual size of all the paintings, as a curatorial record, and for possible display.

While this work was going on, it was noticed that some of the paintings had developed dark or rustylooking spots on the surface. When these were shown to Huta she expressed her readiness to take up the immense task of cleaning and

retouching the paintings before they were put on display.

At this point Manohar enlisted the help of another Italian, this time an expert conservator from Genoa who was known to him through mutual friends. Dr. Laura Tacelli is the Senior Conservator of Paintings at the Regional Laboratory of Restoration of Liguria which is located in Genoa, Italy. When she was approached to give advice about the cleaning of the paintings she responded very readily. Without seeing the paintings, her first impression was that the spots could probably be originating from the glue bonding the canvas to the hardboard backing, as this is a common source of problems in paintings. She asked whether a sample panel could be sent to her for professional examination.

Huta supplied a panel – not one of the Savitri series, but an early study she had done using similar materials.

When Dr. Tacelli examined the panel, she felt that the spots could be caused by organic mould. She enlisted the help of another professional, Dr. Roberta Gasperini of Verona, who is a conservation biologist. She made a detailed examination of the paintings using stereomicroscopy which provides a stereo three-dimensional image of surfaces. From this, an expert can gain various kinds of information. Here are extracts from Dr. Gasperini's report:

CONCLUSIONS

From the observations with the stereomicroscope it emerges that the stains are of a biological nature and that the damage is localised at the level of the paint.

It can be supposed that the panel has come in contact with high humidity and that the thick layer of varnish has prevented evaporation of the moisture contained in the various constituent parts (board, canvas, gypsum, etc.). Therefore at the level of the zone between the varnish and the colour

strata the free moisture has gathered (this is called 'micro-condensation') and the heterotrophic micro-flora has been able to develop (note that spores, bacteria etc. are normally present both in dust and in the various materials and when conditions are suitable they can develop and become liable to damage the substrate).

The biological growth is now stopped since the panel has been transferred to a drier environment (Relative humidity between 45 and 60%, temperature around 25-28°C.) and the moisture has little by little evaporated from the materials which always tend towards equilibrium with the surroundings. As soon as the relative humidity increases, it is highly probable that the growth will resume and that the damage could affect the entire pictorial surface, or even other layers of the piece.

This means that it is essential to intervene to prevent further damage, also considering the fact that this panel, and others in a similar condition, are kept in a geographical and climatic area that favours the development of micro-organisms and organisms, particularly on both biodegradable materials and those of an organic nature.

SUGGESTIONS FOR INTERVENTION

For all the panels showing brown stains, it is recommended to remove the varnish, by preparing a mixture of suitable solvents (following the advice of the restorer) to which can be added a biocidal substance. It is suggested to use the chemical compound O-phenylphenol, OPP, (Fluka-Sigma) at concentrations between 0.5 and 1%, since according to reports in the scientific literature this is an optimal against the growth product heterotrophic micro-flora on canvas, paper, textiles etc. and is, moreover, soluble in organic solvents (Caneva et al. 1996).

Removal of the varnish in this way will also allow partial removal of the micro-organisms and at the same time de-activate them. However, this must be done carefully and delicately to avoid or limit loss of colour as much as possible.

At the end of this operation, probably the surface will still show some stains, although they will be less. At this point it is suggested to re-varnish the panel lightly, to allow transpiration also from the front, dissolving OPP in the varnish and solvent mixture. In this way we aim to take advantage of the lasting effects of the biocide, which on one hand slowly deactivates the remaining colonies, and on the other can prevent new biological attacks.

However, it is essential that after the treatment, both the infected panels and the healthy ones should be kept in an environment where the relative humidity is as constant as possible and not above 60-65%, and in which there is correct ventilation so that moisture can never condense on them.

(Translation by Shraddhavan and Lella, April 2006)

Dr. Tacelli visited Auroville for two weeks at our invitation in April 2006. She brought with her the treated sample panel, Dr. Gasperini's report, and her own report. She met Huta and saw the Savitri paintings, and discussed with her the methods and materials she was using for cleaning and retouching. She also had discussions with Helmut, as the Savitri Bhavan architect, and Shraddhavan who is the project coordinator and the curator of the collection. It was useful that the prototype display cabinet was already available, as Dr. Tacelli was able to see it and make some suggestions for modification.

We also arranged for her to meet representatives of the Italian Pavilion Group, and with one of them, Anna Maria, Dr. Tacelli visited the Art School in the Pyramid at Aspiration, and discussed with the staff and students there the possibility of setting up a training project in restoration and conservation of paintings. The Italian Pavilion Group invited her to submit a project proposal for such a training project, and this is now in preparation.

During the course of Dr. Tacelli's visit she and Shraddhavan prepared a report and recommendations for the future conservation of the paintings. Part of the text is given below:

HUTA'S PAINTINGS: Summary of Findings and Recommendations

By Dr. Laura Tacelli, as communicated to Shraddhavan, April 2006

Findings

According to the biologist's findings, these panels, oil on canvas, are infected by autotrophic and heterotrophic moulds. (Autotrophic moulds form first, and the heterotrophic moulds form on top of them. While the heterotrophic moulds create more visible damage, in this case they are less dangerous in the sense that they will not form if the autotrophic moulds are absent or dormant.)

We can consider these main different layers:

- hardboard
- glue
- canvas (industrial)
- gypsum + glue (industrial)
- oil painting
- varnish

The first 4 layers seem to be a single corpus, industrially produced. Layer 2 is where the degradation has started, since

something in the glue, probably organic, is a fertile ground for moulds. Since it is impossible to separate the layers and eliminate the cause, we must concentrate on cleaning, and on limiting further development of the moulds.

Cleaning

For this we must first remove the old thick oxydated varnish layer with a suitable solvent, and then try to remove as precisely as possible with a surgical blade all the mould that is remaining and spreading between the paint-layer and the varnish-layer.

Some spores are superficial – this means that they have grown on top of the ones that have come up from layer 2 (glue), through the paint and on to the painted surface, where they are spreading, encouraged by high levels of humidity and the waterproof qualities of the varnish. These superficial growths can be removed completely, but the deeper ones that have started from the glue will partly remain. These have to be inhibited, to prevent them spreading further and doing more damage to the painted surface.

Limiting further development

To keep these remaining spores dormant, two main aids can be utilised:

- ❖ anti-fungal products
- avoidance of further sources of infection by
- ➤ maintenance of constant correct humidity (around 60%)
- ➤ maintenance of constant favourable temparature (25° 30 °C)

(N.B. These limits are in accordance with the tropical environment, and are

anyway to be tested with these fungal species, they are not a statement. In Europe, we use lower standards, but in this case we have the problem of maintaining microclimatic parameters that are so divergent from the macroclimatic environment.)

Anti-fungal products

After biological analysis we found the best to be 'orthophenylphenol' (OPP), to be used at not more than 1% concentration in varnish, solvent, and repainting media (possibly also for the surroundings) to give maximum protection with minimum risk – both because this substance is poisonous to humans, and because in higher concentrations it might affect the colours. This intervention has to be carried out by properly trained and qualified people!

Controlling Environmental Conditions (to avoid further development of remaining moulds, and preventing new infection)

In general, for best conservation and to avoid further development of mould, the paintings must be stored and eventually displayed in conditions of constant temperature and humidity, with some movement of air to allow the panels to breathe.

The biologist has advised that the moulds are unlikely to develop further at lower than 65% humidity. The recommendation is to maintain around 55-60% humidity - lower humidity can damage the paintings in other ways (cracking, peeling ...). A constant temperature of between 25 and 28°C is recommended. There should be reliable instruments for measuring the temperature and humidity wherever the paintings are stored and displayed, and a responsible person to check these regularly and take corrective action if necessary.

Storage

The cupboards in which the paintings are currently stored are quite satisfactory from the point of view of ventilation, but should be provided with correct ambient temperature and humidity as soon as possible.

Also there is a possibility that the interior of the cupboards, and especially the hardboard dividers, are infected with mould spores. The plan of replacing the dividers with new ones is a good idea. If possible they could be made of a less moisture-absorbent wood or, better, a completely inert material. Before the dividers are put into the cupboard they can be treated with the anti-fungal solution mentioned above, as also the whole inside of the cupboards.

Paintings which have been treated should be stored apart from untouched ones, for observation of the effectiveness of the treatment, and to avoid re-contamination.

Display

It is suggested that the paintings could be displayed in rotation, say 30 to 50 paintings at a time, for 2 or 3 months only (and not at all during the monsoon). The display cabinets should also maintain the same temperature and humidity conditions as the storage area, and there must be an internal circulation of air to allow the panels to breathe. The interior of the cases, and frames if used, might also be treated with the antifungal solution – this possibility is now being investigated. Low light levels, avoidance of direct sunlight, etc. must of course be ensured. (The paintings which remain in storage can be represented by prints).

From this exercise it became clear that while the actual cleaning and restoration of the paintings would be a long-term task for properly trained and qualified personnel, the immediate need would be to bring the paintings into a physical environment

which would arrest further deterioration. According to the recommendations of the specialists this should be a well-ventilated space where Relative Humidity could be maintained at less than 60%, with temperatures below 28°C. Designs for a suitable space were already included into the plans for the Core Building of Savitri Bhavan, and it is hoped to materialize these facilities over the period 2006-08.

After Dr. Tacelli returned to Italy, Shraddhavan approached the Auroville Archives, and found that such conditions are already being provided there. According to the information given by Tambidorai, in their underground premises the Archives are able to maintain constant conditions of less than 25°C and relative humidity between 45-55%. When Dr. Tacelli was informed about this by e-mail she responded, "That temperature and RH is quite good for Huta's paintings too, but you can't simply put them there. They should first reach those standards slowly. Some months with T° and RH values in the middle. Is that possible?"

It would not be good to transfer the paintings from the room-temperature and humidity they have been used to for the last forty years suddenly to much lower levels. The change has to be made more gradually, to avoid damaging side-effects. So that is now our priority: as soon as possible to provide conditions in Savitri Bhavan that, while not fulfilling the ideal long-term storage conditions, would be more favourable than our ordinary fluctuating climatic states, i.e. a steady temperature around 28°C, and relative humidity approaching 60-65%. We shall also be looking to acquire reliable monitoring equipment so that we are properly informed about the conditions and kept aware of any fluctuations so that these can be regulated.

Shraddhavan, originally from England, has been in Auroville since 1970. Throughout this time she has been involved in education. Since 1999 she has been the project coordinator of Savitri Bhavan, a project of SAIIER which is focused on gathering all kinds of materials which would enhance understanding and appreciation of Sri Aurobindo's mantric epic poem Savitri. The paintings discussed in this article are a uniquely valuable treasure which have been entrusted to Savitri Bhavan.

Auroville Archives

Krishna Tewari

Introduction

Auroville, named after Sri Aurobindo with a meaning as the 'City of Dawn' was founded on 28 February 1968 as an international township with a planned population of 50,000 on the coast of Tamil Nadu in South India. It was conceived by the Mother to give a concrete expression to the evolutionary vision of Sri Aurobindo, where people of all races, religions, cultures and nationalities were invited to live and work together to build the city in a spirit of progressive harmony and peace. The following message in the Mother's own voice was broadcast at the time of inauguration: "Greetings from Auroville to all men of good will. Are invited to Auroville all those who thirst for progress and aspire to a higher and truer life."

Foundation for the new township was laid on 28 February 1968 in a significant and symbolic ceremony, while the beautiful music composed by Sunilda of the Ashram was played. A boy and a girl representing all the 124 member nations of the world body and 23 different states of India, each brought a handful of soil of their respective countries/states and poured it into a marble lotus shaped urn in the amphitheatre at the centre of the proposed township to symbolize Human Unity. This was then sealed by the senior most sadhak of Sri Aurobindo Ashram, Shri Nolini Kanta Gupta

Auroville was sponsored by the Government of India and endorsed by a number of unanimous resolutions of the General Conference of UNESCO – first in 1966 and progressively in 1968, 1970, 1983 and 1991. One of the very important written notes in the Mother's own hand on 8 September 1965, well before the inauguration, gives a very apt description of the proposed town:

"Auroville wants to be a universal town where men and women of all countries are able to live in peace and progressive harmony, above all creeds, all politics and all nationalities. The purpose of Auroville is to realize human unity." Yet another message of the Mother needs to be quoted – "Auroville is to realize the ideal of Sri Aurobindo who taught us the Karma yoga. Auroville is for those who want to do the yoga of work."

Described as a "Living Laboratory", the following

Charter of Auroville was announced by the Mother at the time of inauguration. It was read out in 16 different languages by nationals of those countries and states of India at the inauguration as the soil of the nation was poured into the lotus shaped urn:

- a) Auroville belongs to nobody in particular. Auroville belongs to humanity as a whole. But to live in Auroville one must be a willing servitor of the Divine Consciousness.
- b) Auroville will be the place of unending education, of constant progress and a youth that never ages.
- c) Auroville wants to be the bridge between the past and the future. Taking advantage of all discoveries from without and from within, Auroville will boldly spring towards future realizations.
- Auroville will be a site of material and spiritual researches for a living embodiment of an actual Human Unity.

Concept And Challenges

The site chosen for the project was a very challenging one, in one of the most backward areas of the then South Arcot District of Tamil Nadu along the sea coast, bordering the town of Pondicherry to the South. The land was barren, eroded, overgrazed and devoid of top soil. In fact one of the Tamil Nadu State Government reports of 1950 had described that this area may become uninhabitable by human beings in 25 years. The first task for the pioneer Aurovilians was therefore to restore life into this virtually 'dead' land.

Not only has the Auroville project faced natural, physical and environmental challenges but man-made problems, too, in the pursuit of its ideals including financial. The activities besides that of planting development of lush green forests and entirely organic farming, include the following to name a few:

- a) Varying architectural designs for housing.
- b) Research into alternative sources of energy (solar, biogas and wind).
- c) Establishment of a Centre for Scientific Research.
- d) Setting up of industries to raise the much needed funds for development.
- e) Research into value-oriented education not only for Aurovilian children but for the villages in and around Auroville.

- f) Provision of health and sanitation facilities.
- g) Provision of clean drinking water to the numerous villages (namely 35,000 village population).
- Creating awareness among the villages through an outreach programme organized by a special Village Action Group which arranges training and cultural events through the community centers in the villages.

Progressive Development

The progressive development of this unique experimental project with all the inherent challenges – not only physical and material but to find an answer to the biggest challenge facing the world today of achieving the true human unity – is of immense interest for future research scholars, teachers, national governments and humanity at large. It is, therefore, imperative that a complete record of the progressive development and growth of Auroville since its inception in February 1968 in all its diverse activities and happenings is collected and preserved for future study and research. All this had to be done in a gradually evolving process (attempted at the international level participation for the first time) without any imposition and rigidity to permit full blooming in initiatives and volunteer talents from all over the world.

For achieving the above stated purpose, the Auroville Archives was set up in 1992 in a temporary accommodation in the basement of the Sri Aurobindo Auditorium in Bharat Nivas, meant for electrical cables and air-conditioning ducts for the Auditorium on top. The first priority was to bring together all available but scattered relevant documentation in one secure place and store it under proper conditions to prevent deterioration due to humidity, heat and dust, of which there was plenty to worry about in the chosen coastal area. This has been done in the best possible way, considering the existing limitations of space, storage facilities and financial resources. With small donations from some Auroville units and from friends in India and abroad, the existing space for the Auroville Archives has been organized and fitted with an air-dehumidifier and an air-conditioner to keep the humidity and temperature within permissible limits, in a secure and dust-free environment.

At the geographical centre of Auroville is Matrimandir, described by the Mother as the 'Soul of Auroville' being constructed as per the 'Dream and Vision' of the Mother – a place for concentration and peace. It is being built mainly by voluntary Aurovilian workers with some paid workers. Above details indicate the multifarious activities undertaken in Auroville with limited numbers of Aurovilians and the challenges faced by them – both natural and man made – when there is no laid down

"hierarchy" and "No rules and regulations" to guide and enforce an organization – with every resident Aurovilian free to choose his/her own place/type of work.

Auroville also has also undergone and survived through another kind of challenge when an organization claimed ownership of Auroville project in violation of the first point of the Charter. This had invited an intervention by the Government of India to protect Auroville through an Act of Parliament in 1980 called the "Auroville (Emergency Provisions) Act 1980". This was later replaced by another Act called the "Auroville Foundation Act" in 1988 granting a special statutory status to Auroville to ensure its unhindered growth and development according to the Charter laid down by the Mother. This Act of 1988 appoints three bodies to help the growth of Auroville as per this charter.

- a) A Governing Board appointed by the Government of India with a Secretary based in Auroville.
- b) An International Advisory Council consisting of nominated personalities from around the world.
- c) The Resident's Assembly consisting of all the adult Auroville residents above the age of 18.

Aims and Activities of Auroville Archives

The Auroville Archives were established to keep a record of the progressive growth of Auroville over the years from its very inception, difficulties faced and dealt with in a gradually evolving process without any imposition or rigidity to permit full blooming in the initiatives and talents of resident Aurovilians from 38 countries today, living and working together in Auroville. There are numerous Auroville International Centres in different countries which promote the ideals of Auroville and help in various ways and participate in the growth and development of Auroville.

The overall aims and objectives are clear:

- a) To store for ease of reference all writings (manuscripts) of Sri Aurobindo and the Mother having a bearing on the establishment and growth of Auroville.
- b) To gather all available material documents, letters, photographs, audio and video records and other reports that have a bearing upon the aim and ideals and development of Auroville.
- c) To make a preliminary classification of collected material.
- d) To store all collected material under secure and safe conditions.
- e) To keep a historical record of the origin and development of Auroville and the Auroville International Centres in different countries.
- f) To preserve books and publications as well as press

- coverage in India and in other countries relating to Auroville.
- g) To provide facilities for research and study of this unique international project to achieve the ideals of Human Unity to realize the vision of Sri Aurobindo.

Archives houses not only the written records of the conception, planning and developmental growth, problems faced in that connection, different solutions tried out, records of meetings among Aurovilians on different aspects in trying to find solutions, all activities, photographs, video records including thousands of slides, records of original research done in different fields like alternative energy, building designs, low-cost housing, organic farming with development of organic pesticides, financial management with a new kind of approach to economy in trying to implement the Mother's directions on 'no money exchange in Auroville'. The list is endless and it was felt that all the records must be preserved to provide a base of research into the activities in this 'Living Laboratory', for posterity.

A computer system has been installed in the Archives to transfer the written and other photographic records including audio on data base for permanent preservation and to connect the Archives to the Internet for quicker exchange of information.

Long Term Needs

As stated earlier, Auroville Archives is housed in a temporary improvised space in Bharat Nivas in the absence of another suitable habitat. This restricted available space is now fully utilized and we have had to leave some of the storage cupboards outside the temperature/humidity/dust-controlled space. This cannot be accepted for long and additional space is needed urgently to cater to the imperative needs of expansions of storage space and other facilities with temperature/humidity/dust control.

There is need for a fumigation chamber so that papers brought to the Archives are fumigated to destroy the fish ants or other insects before storage. This small facility will have to be created in a detached place away from the storage. More steel cupboards are required to cater for increased needs of storage and easy access.

Yet another need is for the upgradation and expansion of computer facilities e.g. for conversion of audio cassettes on CDs and procuring other peripherals besides the normal needs of stationary and other requirements for normal functioning. A start has been made to achieve the above objectives in the temporary space now available but this will not meet the

progressive long term needs and demands. As a matter of immediate priority, all available information in the form of text (books, publications, original papers, etc.), photographs, slides, audio and video has to be converted into digital format and stored in a computer base. The aim would be, in future, for this data to be made available/ accessible nationally and internationally on Internet for spread and exchange of information.

As a long term measure, there is need for a purposebuilt accommodation for the Archives to cater for expansion of storage space and other special needs. The present available space is already fully utilized for the material collected so far which is only fractional with the present day population of less then 2,000 for the planned township of 50,000.

Considering the fact that the project of Auroville has been supported over the years by a number of unanimous resolutions of the General Conference of UNESCO, it is advisable that a link is established by Auroville Archives with UNESCO through the General Information Programme (PGI) under the heading "Development of Libraries, Archives and Documentation Services". A request has already been forwarded through the Government of India for the Programmes International Advisory Committee and the General Conference of UNESCO to endorse the Archives project of Auroville.

Beneficiaries of the Project

No amount of ad hoc modifications and other changes in the existing space below Sri Aurobindo Auditorium in Bharat Nivas can satisfactorily and fully meet the needs of Auroville Archives as the township further develops and expands. It is obvious and imperative that a properly designed building is made available for Auroville Archives in a central location to facilitate future (short and long term) researches. It would be no exaggeration to state that the humanity as a whole will be the beneficiary of the Auroville Archives project, especially those interested in the ideals of human unity and peace in the world.

Krishna Tewari was commissioned in the (British) Indian Army in 1942 and took part in World War 2 in Burma and Malaya. He also took part in wars fought by Independent India. On his retirement, he was awarded the Param Visishth Sewa Medal for his 'distinguished services of the most exceptional order' besides other awards won earlier. He moved to Sri Aurobindo Ashram immediately after retirement and then to Auroville. He set up the Auroville Archives in 1992. He has authored a book "A Soldiers Voyage of Self Discovery".

Agriculture in Transition - An Auroville View

Bernard

Contrasting Perceptions

Organic farming is defined as a system of practices inspired by ecological processes in nature. It is a method of learning from and working in harmonious cooperation with natural processes and natural wealth. Beyond this a deeper philosophical and spiritual dimension can be stipulated – and this is where organic farming finds itself diametrically opposed to current conventional agriculture - expressing itself in an attitude of care and respect for all life on earth or a perception that Nature is Sacred. Most of the variants of organic farming such as nature farming, natural farming, biological agriculture, permaculture, bio-intensive and bio-dynamic agriculture can, if not entirely then largely, be covered by this definition.

Conventional agriculture also referred to as chemical, intensive, or modern farming, on the other hand ends up coercing and exploiting nature in the name of maximizing food production. It is a constant struggle against the natural processes in which man has to overcome nature. Its underlying principle can best be illustrated by the word "cide" which means to kill; pesticide, insecticide, fungicide, nematodicide, germicide, vermicide, bactericide leading ultimately to ... homicide?

Another feature of this system is the "thingification" of the living. Plants and farm animals are 'things' with 'x' value or none. After sexing layer chickens, male chicks are roasted and fed to their little sisters. The left over parts of slaughtered cattle, unfit for human consumption, are recycled within the industry, into animal feed for other cows. This feat of cannibalism has given the world a new type of sacrifice, that of offering hundreds of thousands of cows and birds on the altar of the many armed goddess of efficiency, utility and increased profit margins.

Organic farming follows and enhances the path of

evolution while chemical farming entails devolution. A number of allegations tend to stigmatize organic farming as primitive, unenlightened, an unproductive enterprise, good for the rich who can afford its produce but insufficient to feed the mass of the world's population. These charges are typified by remarks such as, "Will organic farming feed the world?" or, "Remember that organic farming brought about huge famines in the past."

In contrast conventional chemical agriculture bears epithets such as – scientific, superior and progressive, highly productive, the only way to feed the starving masses.

Both portrayals need a closer look.

However, in the space available in this publication we are presenting only the portrayal of organic farming. If you would like to read the portrayal of conventional agriculture as well as a section outlining India's agricultural heritage, the full text is available on request at pebblegarden@vsnl.net

Genesis of Modern Organic Farming

The history of the present organic farming¹ movement starts with Albert Howard in India and Rudolf Steiner in Austria.

Howard declared that "By 1910 I had learned to grow healthy crops practically free from disease, without the slightest help from mycologists, entomologists, bacteriologists, agricultural chemists, statisticians, clearing-houses of information, artificial manures, spraying machines, insecticides, fungicides, germicides, and all the other expensive paraphernalia of the modern Experimental Station".

His method called the Indore process was basically the traditional Indian farming system which he learned from the local farmers but strengthened

with a proper composting technique. The work of A. Howard was widely publicized by J.I. Rodale in the US and became known and influential world-wide. This new concept brought about spectacular improvements in agriculture and spread the world over.

Inspired by the work of Howard, Lady Eve Balfour², an agronomist, started her Haughley experiment in England. In her meticulously designed experiment spanning almost a decade she proved that organic farming can in all ways outperform its chemical counterpart.

In the West, after WW I, chemicals were introduced in agriculture on a wide scale. The factories that produced nitrogen for the manufacture of ammunition and bombs now turned out urea for throwing on the land. But soon after this farmers began to notice the decline in the vital force of their seed material. They requested Steiner to enlighten them on this issue and in 1924 the renowned lectures on Agriculture took place in Austria. Ehrenfried Pfeiffer studied and developed the teachings of Steiner and refined the system known as biodynamic agriculture. Pfeiffer brought biodynamic agriculture to Holland and later to America.

It was in the wake of WW II that modern chemical farming spread to all corners of the world. The industry that produced tanks and other war materials and vehicles on the conveyer belt now rolled out combine harvesters, pick-ups and tractors. No wonder that after the mechanical harvesting of beets or potatoes the fields look like Verdun after the Great War.

After Indian independence K.M. Munshi³, the first minister of agriculture, drew up a plan for renewing Indian agriculture. He was well aware that India should develop agriculture on its own inherent strength and tradition and not imitate the exploitative Western trend. Plan Munshi was rooted in the philosophy of self reliance and strengthening the ecological base of agriculture, as expressed by Gandhiji, J.C. Kumarappa, Meerabehen and Payarelal. The plan to rebuild and regenerate the ecological base of agricultural productivity was worked out in detail. It was founded on a bottom

up decentralized and participatory methodology. Repairing nature's cycles and working in partnership with the natural processes was viewed as being central to the indigenous agricultural policy. Independent India however tragically abandoned this ecologically sound option, submitting instead to pressures from US institutions promoting the capital intensive, industrial model for a 'modern' Indian agriculture. The drought of 1966 and the heavy import of food grain were used to firmly establish new policies which continue to dominate the agricultural scene even today.

Voices of dissent never remain stifled for too long and there has been a healthy resurgence in recent decades.

Winds of Welcome Change - India/Asia

In 1984 the first all–India organic farmers conference was organized in Sevagram, Wardha⁴. For the first time the severe shortcomings of modern farming were thrown open for public debate. Startling facts about falling yields, declining soil fertility, tremendous losses of indigenous genetic resources, poured in from all The restoration of forest cover, as a buffer for a sustainable agriculture, was given great importance. This event marked a revival of pride and confidence in India's hidden potential as revealed by outstanding individuals such as Dharampal the distinguished historian, Banwarilal Choudury, Gandhian and untiring village worker, Dhabolkar the eccentric agri-mathematician, young avant-garde, Vandana Shiva, Korah Mathen and Claude Alvares and many others.

Since then organic farming has grown steadily and is thriving in many states as well as at the national level. The Organic Farmers Association of India – OFAI – has taken the work of ARISE⁵ a step further and is presently coordinating efforts of Indian farmers to remould Indian agriculture.

In Tamil Nadu the organic farming movement has taken remarkable shape in recent years. With more than 20,000 farmers shifting to organic practices in the last 3 years, this movement owes its success largely to the work of pioneering farmers and dedicated individuals rather than institutions. There are thriving networks within networks. A vibrant internal dynamism is obvious and large numbers of

innovative farmers are now enthusiastic trainers. Their cowshed classrooms burst at the seams with farmers seeking change. Many farms deserve to be recognized as centres of excellent research. Publications, magazines and books on organic farming are flourishing. The leaders are constantly on the move, addressing farmers' gatherings attended by the 100s in villages all over the state. Although the focus is on developing and promoting organic farming techniques, the change being encouraged is wide ranging. The movement also addresses the need to revive Siddha traditions of medicine, the need to inspire youngsters to return to the land, the need to conserve natural resources and above all the need to love nature and serve her. ⁶

Everywhere in India the organic farming movement is growing strong, with mounting numbers opting for ecological alternatives. The Organic Farming Source Book⁷ will soon run into many volumes.

The resurgence is not limited to India alone. Worldwide, farmers movements filled with the spirit of their indigenous heritage have brought about unique and amazing innovation in farming. They have brought productivity on par without the destructive consequence characteristic of chemical agriculture. In many cases crop yields are now rising, doubling and even trebling, the ceiling of conventional farming.

'Masipag' in the Philippines created sophisticated organic practices based on indigenous genetic resources in rice cultivation that shadows the high input conventional system. Voly Vary Maroanaka or SRI, a rice cultivation method developed by a priest in Madagascar revolutionized rice cultivation to the extent that all modern rice research and breeding appears as a child's prank in comparison. In South America the Waru Waru are being reclaimed and the original Indian communities are finding back their lost greatness. Everywhere in the Western world, South America or Africa, organic farming is rising and becoming a force that can bring about the needed change in agriculture and hopefully in society at large.

The Pathogen within Organic Farming

As organic farming makes rapid advances and offers bold technological alternatives, a familiar

danger lurks menacingly round the corner - its abduction by big business interests. With the rising popularity of organic products, the tropics are increasingly eyed as cheap sources of organic foods for Western countries. The tropics are being invaded by the certification drive. As this is a costly enterprise, small farmers are immediately excluded. Large business concerns have entered the field attracted by bumper profits. Clever entrepreneurs are buying up agricultural land from poor farmers and besides making motorbikes or soap are now joining the organic bandwagon on a grand scale, raking in nice profits. The link between forests and farms has been driven to the background if not totally eclipsed. Trade across nations and even continents is as old as civilization itself but the extent and content were most likely very different then. While it is true that people in the cities have the right to safe food and even if export of surplus foodstuffs can earn farmers a better income, certain questions still remain.

Is it socially sound to feed the rich in the West with organic food from poorer countries? How environmentally sound is it to transport food over large distances?

The British colonial administration considered the availability of 200 kg of food grains per person per year as the absolute minimum. Below that is famine. Food grain for human consumption as late as 1990 was 180 kg per person. The per capita food grain availability in India in 2000 was 201 kg Evidently this has not changed in the last three centuries and is the lowest in the world today! In this context can export of food be considered as fair trade?

In Conclusion

Que sera? The future cannot rely on the conventional chemical farming system to provide food for the country or the world, to do so would be suicidal, an end to evolution. The road to farming practices of the past is closed. Its know-how and resource base are lost. And now the commercialization of organic farming poses if not a threat then at least grave concern. Once projected as a viable alternative to ecologically damaging and exploiting ways of conventional agriculture, organic farming in its exploitative commercial form is now compounding the problem of food security in India.

In this period of transition, there seems to be a lack of vision as to which road to take for the immediate development of agriculture. Any randomly selected treatise on agriculture contains lamentations about the past, eulogies about modern farming and the promise of GMO's as the final solution. In the same breath, the importance of indigenous agriculture, farmers wisdom and eco-sensitive practices are emphasised – a confused *khichdi* of incongruous ingredients.

While ideal solutions are evasive, until we remain within a limited consciousness, it is useful to constantly remind ourselves of the principles pointing in the right direction.

- Bring the food economy as close to home as possible.
- Develop and use simple farming technologies following Nature as a teacher
- Maintain and enhance soil fertility within the economic catchment
- Conserve & optimise use of rain water
- Reduce fossil fuel dependence as much as possible
- Protect and conserve local biodiversity forest species, cultivated plants, macro and micro fauna

An Auroville Experience

In the mid 1990s after moving from Annapurna, Deepika joined me in looking after the northern corner of Aurobrindavan. We worked part time, protecting the place, planting, making a good fence. After withdrawing from training activities and our work for ARISE in 1998, we took in an adjoining piece of Auroville land and decided to concentrate on land regeneration work.

This is a small nook in a large tract of about 8000 ha of gullies that stretch over Aurobrindavan and beyond towards 'Usteri'. Overexploited by pebble and soil mining, repeated cutting and grazing of vegetation, the land has become a harsh expanse of pebbles and laterite chunks embedded in poor clays.

The broader convictions that form the background to our experiment are that:

- Wastelands and marginal lands (50 million ha in India) have a productive potential that can certainly be restored, into productive forests as well as farms.
- This can be done with simple techniques based on natural principles, minimum financial investments, resources from home and the immediate neighbourhood in a way that is gentle on the environment and people.
- Food security at the home/community level, the oldest form of agriculture, is the only answer to insecurities created by global trade in essentials.

We are trying to translate these convictions into small-scale activities on the land:

- Establishing live fences
- Conserving local forest species
- Creating small water bodies
- Planting mixed timber, bamboo and 'useful' species
- Setting up a home garden
- Starting a small orchard

Building Soil & Feeding the Plant

The central challenge in every area of our work has been to restore soil fertility, especially for garden crops. While many would not even try, we would like our experiment to confront certain questions. Is it possible to grow food and other garden crops on such devastated land? Can this be done with an absolute minimum of external inputs? Without bringing good soil and manure from somewhere and degenerating one place to regenerate another? By buying compost from the villagers are we not compelling them to purchase fertilizers for their own field?

The theoretical basis of our work is drawn from the principle of optimum sunlight harvesting which governs healthy plant growth in all natural ecosystems. This natural principle has been developed into efficient systems of farming by researchers such as Claude Bourguignon and by the Prayog Parivar of S.S. Dabholkar. We are using both to develop a method suited for our specific conditions and needs.

Plants feed themselves for 95% on the atmosphere and from sunlight, while soil contributes only 5% of the diet of plants. This might make it sound as if the soil is of little importance. But the fact that the total biomass volume of roots is greater than that of the leaves indicates how crucial the soil component is. Plants can favourably harvest sunlight and express their maximum potential only when soil conditions are ideal. The ease with which roots can penetrate the soil and have access to a complete diet of minerals will determine the extent of optimal absorption of atmospheric elements. The crux is to obtain an optimal and clean leaf and canopy area by providing the best conditions for feeding roots along the drip line of the canopy.

The Prayog Parivar prescribes a method of soil building which imitates the manner in which soil is formed and maintained in a forest. If we look at the forest floor we see layers of leaves and twigs, pats of dung, bird droppings, rain, termites, ants, earthworms, burrowing animals and leaves again – year after year. For the garden we try to do something similar, using very thin alternate layers of leaves/biomass and soil to create beds and heaps. The process is further refined and enriched in numerous creative ways using neighborhood and home resources, recycling crop residues, kitchen waste etc.

With this method it is possible to obtain the best possible leaf and canopy area required for optimum harvest of sunlight and production.

Adapting to our specific conditions we grow and use Acacia coleii (holosericea) and Dodonea viscosa as pioneers and recycle every bit of them for building soil for the garden area. With these hardy pioneers we have managed to grow our major biomass requirement on the site.

Together with leaves gathered manually from the neighbourhood, and soil collected from deepening ponds, within a short time we were able to build up soil for the garden. We now have about 400 sqm of built-up 'forest' soil where we grow, every season, vegetables, herbs, flowers and conserve nearly 80 hardy plant varieties for home For fruit trees we are following gardening. similar techniques for canopy development. A whole line of bamboos, now 7-8 m tall were planted in heaps built in the Prayog Parivar way, above the ground. This method of soil building has been tried out in other locations in Auroville as well. In Maharashtra where Prayog Parivar originated, there are productive organic farms obtaining stunning yields, in grapes, sugarcane, vegetables and other crops.

Behind the garden is a forest area requiring much less 'management'. Here the work besides some protection and some interplanting is left mainly to nature. For the earth is not for man alone.

Commercial food crops have been developed with priorities such as short stature for ease of harvest, short duration, convenient transport, etc. but rarely for food value, taste, nourishment – qualities that consumers need. Plant varieties suitable for home gardens are disappearing together with the skills and resources needed to grow them.

The home base of farming has suffered badly with the industrialization of agriculture. We desperately need to bring farming back home.

Mother visualized, "A small house and a garden for everyone".8

Bernard joined Auroville in 1975. He has been involved in farming and tree planting and is presently working with Deepika on "Wasteland Reclamation aiming for Self Reliance based on Home and Neighbourhood Resources". He co-founded (with Vandana Shiva) ARISE and was its National Secretary. He is at present Advisor to OFAI – the Organic Farmers Association of India.

Notes:

- The word organic, derived from organism, was introduced by Lord Northbourne in 1940. In his view a farm is like a living organism whose interrelated parts form a living whole.

 It is interesting to note that Sri Aurobindo, in his 'Back to the Land' of 1908 emphasized the need for the
- Lady Eve Balfour was the niece of Lord Balfour, the Conservative British Prime Minister. At the age of twelve she decided to become a farmer. She was the first woman to take a degree in agriculture in England. At 21 she used her inheritance to purchase a farm. She became an expert in plowing with a horse team and looked after the animals herself.
- K.M. Munshi was a student of Sri Aurobindo in Baroda and was profoundly influenced by him. Sri Aurobindo went out of his way and received Munshi in his room in 1950.
- Jaap and I were delegated to represent the Auroville Food Coop. We met people who surpassed us immensely. In subsequent meetings it was an honour to meet Dr. Richarria who related the whole Indian experience of rice cultivation and Marjorie Sykes who fundamentally questioned modernism.
- ⁵ ARISE, Agricultural Renewal in India for a Sustainable Environment was born in Auroville during an all India organic farmers' convention in 1995.
- ⁶ The role of Auroville in shaping the movement in its initial stages is acknowledged by its leaders.
- ⁷ Published by The Other India Press, Mapusa, Goa.

growing middle class to return to the village to revive agriculture.

From "The Aims of Auroville – Following Mother's Guidelines", House of Mother's Agenda, 1999.

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The Work at Present

The Mother

What is the most useful work to be done at the present moment?

The general aim to be attained is the advent of a progressing universal harmony.

The means for attaining this aim, in regard to the earth, is the realisation of human unity through the awakening in all and the manifestation by all of the inner Divinity which is One.

In other words, – to create unity by founding the Kingdom of God which is within us all.

This, therefore, is the most useful work to be done:

- For each individually, to be conscious in himself of the Divine Presence and to identify himself with it.
- 2) To individualise the states of being that were never till now conscious in man, and, by that, to put the earth in connection with one or more of the fountains of universal force that are still sealed to it.
- To speak again to the world the eternal word under a new form adapted to its present mentality.
 - It will be the synthesis of all human knowledge.
- Collectively, to establish an ideal society in a propitious spot for the flowering of the new race, the race of the Sons of God.

*

The terrestrial transformation and harmonisation can be brought about by two processes which, though opposite in appearances, must combine – must act upon each other and complete each other:

- 1) Individual transformation, an inner development leading to the union with the Divine Presence.
- 2) Social transformation, the establishment of an environment favourable to the flowering and growth of the individual.

Since the environment reacts upon the individual and, on the other hand, the value of the environment depends upon the value of the individual, the two works should proceed side by side. But this can be done only through division of labour, and that necessitates the formation of a group, hierarchised, if possible.

The action of the members of this group should be threefold:

- To realise in oneself the ideal to be attained: to become a perfect earthly representative of the first manifestation of the Unthinkable in all its modes, attributes and qualities.
- 2) To preach this ideal by word, but, above all, by example, so as to find out all those who are ready to realise it in their turn and to become also announcers of liberation.
- 3) To found a typic society or reorganise those that already exist.

*

For each individual also there is a twofold labour to be done, simultaneously, each side of it helping and completing the other:

- An inner development, a progressive union with the Divine Light, sole condition in which man can be always in harmony with the great stream of universal life.
- 2) An external action which everyone has to choose according to his capacities and personal preferences. He must find his own place, the place which he alone can occupy in the general concert, and he must give himself entirely to it, not forgetting that he is playing only one note in the terrestrial symphony and yet his note is indispensable to the harmony of the whole, and its value depends upon its justness.

Words of Long Ago 7 May 1912