

# Toxin Free Agriculture

## **Preamble**

The 4-H concept was implemented when youth farmer organizations were established in Iowa, United States of America in 1903.

- i. H - Head for clearer thinking,
- ii. H - Heart to greater loyalty,
- iii. H - Hands to larger service,
- iv. H - Health to better living

The (i), (ii), (iii) above represent cognition (knowledge), affect (attitudes) and psychomotor (skills) which are the three major domains of modern education.

In his epic poem Subhashithaya, Alagiyawanna Mukaweti mentioned these same domains in the verse "Pinmada Puthun Siyayak Laduwath Nisaru, Guna Nena Belen Yuthu Puthumaya Itha Garu" (It is futile to have a hundred meritless sons, only a son endowed with kindness and wisdom is most honoured).

- i. Guna – Heart –Attitudes
- ii. Nena – Head – Knowledge for the mind
- iii. Bela (Balaya) – Hand – Skills

Nothing illustrates the value of healthy living better than the old adage 'Even a king who is ailing is worthless'.

Having identified three challenges which have compelled young people to distance themselves from agriculture, we have already initiated a programme based solidly on the above factors to offer practical solutions to overcome such challenges.

## **Challenges**

- a. Attitudes of society towards farmers and agriculture which are uncomplimentary to say the least and the challenge of social crisis linked thereto.

- b. Economic problems encountered by farmers within the production process and the challenge of equipping them with know-how to counter such challenges through education on emerging trends of production processes.
- c. Problems faced by farmers in marketing their produce and the challenge of educating them to overcome market related issues and obstacles.

### **Our key expectations**

- i. Creating agriculturalists transcending the traditional nomenclature of farmer.
- ii. Improving social media, internet and computer literacy within the agricultural sector.
- iii. Designing methods within modern practices using traditional knowledge/ 'kem' practices for combating pests and weeds.
- iv. Preserving experiences and traditional knowledge (currently neglected) of indigenous communities (Veddha Community) living in Dambana, Rathugala and other areas of Sri Lanka.
- v. Perpetuating aesthetic aspects including songs, music, drama and dances, poems and sports (games) within farming communities.
- vi. Diversification of crops targeting local and international markets, rotation of crops and preserving and promoting economic crops with high income potential as well as traditional crops albeit economically disadvantageous.
- vii. Integrating this with cultivation of vegetables, fruits, green leaves, yams, medicinal herbs, other crops and spices related crops as well as livestock industry for non-meat products or dairy farming and beekeeping.
- viii. The underlying theme of all these is the promotion of eco-friendly weed and pest control systems, the use of organic fertilizer as well as putting up biogas units thus overcoming the challenge of obtaining a better yield. (This is very important as non-communicable diseases such as diabetes, cholesterol, high blood pressure, heart diseases, kidney and liver disorders and complications cannot be underestimated as they pose an increasingly dangerous threat than communicable diseases)

- ix. I also have a very broad view on the role that can be played by agriculture in promoting co-existence among diverse ethnic groups and strengthening territorial integrity of Sri Lanka by reinforcing traditional inextricable relationships amongst the Sinhala, Tamil, Muslim and Burgher communities and followers of Buddhism, Hinduism, Islam and Christianity. This is a matter that should be discussed separately.
- x. Integrating eco-friendly tourism into this project will ensure its sustainability.

### **A journey of three years**

You will be able to have some idea about my contribution and the ambitious initiative launched by me to play my part to overcome this challenge in the year 2013 by watching the accompanied photographs and the video clip (details of the this initiative can be accessed from my website [www.buddhikapathirana.com](http://www.buddhikapathirana.com)) when I was a backbencher of the Opposition before this government assumed office.

[Click here to watch video](#)

<https://youtu.be/dzpRTSSjYmo>

[Click here to watch photographs](#)

[https://www.facebook.com/Buddhikapathirana.mp/photos/?tab=album&album\\_id=10154932501764901](https://www.facebook.com/Buddhikapathirana.mp/photos/?tab=album&album_id=10154932501764901)

My firm resolution is to share with you the experiences and positive outcomes gathered during the three years of this process and implement it as a model in all 25 administrative districts of Sri Lanka.

This should not be reduced to a simple notion that this is only a collective farm producing organic food items. It is true that young men and women are at the forefront of this project. The project addresses traditional knowledge, traditional crops, conventional /modern aesthetic and sporting aspects connected with the agricultural sector, programmes for women headed households, senior citizens, projects that offer leadership to women, persons with special abilities (persons with disabilities) as per their capabilities and skills, target groups such as indigenous communities (the Veddha

community), ethnic and religious diversity and the caste system which is not discussed in open.

### **Our first step**

The first model project was carried out in a half acre land at picturesque Polgahawewa Tank at Ihalagama village in close proximity to Ragama Town in the Gampaha District of the Western Province.

[Click here to watch video](#)

<https://youtu.be/dzpRTSSjYmo>

[Click here to watch photographs](#)

[https://www.facebook.com/Buddhikapathirana.mp/photos/?tab=album&album\\_id=10154932501764901](https://www.facebook.com/Buddhikapathirana.mp/photos/?tab=album&album_id=10154932501764901)

We now expect your kind patronage for the construction of the first Agricultural Education, Cultural and Sports Centre which is expected to cost SL Rs. 50 million. (approximately \$ 313,000) We have already prepared a detailed budget in this regard.

We expect to provide this training completely free of charge for young people with a knack for agriculture and to empower them on long-term basis while ensuring the continuation of the project by creating sustainability through the project itself consequent to the exhaustion of initial funds.

In addition to the subject related matters, these courses conducted free of charge will include the use of new media/ social websites/internet/ information technology and marketing methods.

A project of this nature which brings together the Sinhala, Tamil, Muslim, Burgher and indigenous communities, integrates agricultural education, marketing and information technology including social networks and tourism and mobilizes not only organic food production but sports (games), songs, poems, dramas, dances and all other sectors as well as traditional knowledge has never ever been implemented in Sri Lanka.

## **One and only project in Sri Lanka**

**Since this is the one and only project (at present) being implemented in Sri Lanka incorporating all aspects relevant to agriculture, it will be a historic event with a challenging nature.**

**Shouldn't you therefore be a partner of such a project? Shouldn't you, without any further delay, make your contribution on behalf of the fatherland and its people?**

## **Second challenging step**

This project was launched in Ragama area of the Gampaha District in August 2013. Impressed by the fledgling project, a Sri Lankan academic Mr. R.M. Weerasinghe donated 22 acres of his private land located at scenic Dumabara valley in the Kandy District of the Central Province to the Samadhi Foundation. ([additional information on the Foundation can be accessed through our website www.samadhifoundation.org](http://www.samadhifoundation.org)) A project of SL Rs 275 million (approximately \$ 1,720,500 has been planned for this land. We are already in possession of detailed budget proposals for this purpose. Arrangements have been made to initiate the project using donations amounting to nearly Rs. 30 million we have already received.

Major components of this project linked to agriculture are given below. The most salient feature of the project is that all activities implemented will be integrated with diverse sectors of agriculture.

## **Major Units of the Training Centre**

### **(i) Provision of knowledge**

#### **(a) Education Unit**

The Education Unit will conduct residential/ one-day training programmes, leadership training workshops, programmes with practical activities, seminars, symposiums and lectures.

#### **(b) Library and Research Unit**

An e-library with Sinhala, Tamil and English CDs, DVDs and photographs and a conventional library with a large collection of books and a research and analysis

unit for those engaged in the fields of university and education and agriculture are to be set up. A computer unit with internet facilities will also be a part of this unit.

### **(c) Maintaining an Information Centre**

#### **(ii) Arts, aesthetics and spiritual development**

- a. A Yoga and meditation unit as well as a development unit relevant to leadership training sector will be established.
- b. Encouraging and promoting regional cultural items such as upcountry, low country and Sabaragamuwa dances and in particular establishing a unit for promoting dancing, arts and aesthetic skills of young men and women in the age group of 16 to 30 years. Cultural items of the Tamil, Muslim and indigenous communities too will be added to this.
- c. Training programmes associated with film and television industries and extending support for aspiring artistes.

#### **(iii) Skills Development Field**

- Challenging outbound training programmes in hilly terrains and remote areas
- Walks, cycle tours
- Agricultural vocational education programmes targeting nature
- Practical field training associated with dancing, arts, aesthetics
- Practical training/activities associated with leadership training
- Training in other sectors relevant to skills development

#### **(iv) Health Development Sector**

Health sector cannot successfully function without regard for eco-friendly agriculture.

The aforementioned fields of

- i. Head - Development
- ii. Heart – Development
- iii. Hand – Development too will contribute for the development of the physical and mental health. In addition,
  - a. Eco-friendly

- Model project for cultivation of herbs
- Model project for cultivation of vegetables
- Model project for cultivation of fruits
- Model project for cultivation of yams
- Model project for cultivation of green leaves

Model project for cultivation of other trees with economic value will be implemented. ( The list of plants to be cultivated under these six model projects is attached hereto as Annex 01)

A compost (organic) project will be implemented for this purpose and it has been planned to implement the project without using insecticides, pesticides, weedicides and chemical fertilizer.

- b. Agri consultation and research unit, food dehydration and compost (organic) manufacturing units too will be merged with this.
- c. Beekeeping and dairy farming projects will be launched but animals will never be raised as livestock for meat.
- d. A project that would combine psychological counseling, spiritual meditation, yoga exercise programmes and an integrated eco-friendly tourism industry will be added to this.
- e. Even the hostels for training programmes and counseling centers will be built employing eco friendly health promoting techniques.
- f. Priority will be accorded to a gymnasium.
- g. The maximum extent possible of the most suitable area of the aforesaid 22-acre land at Dumbara will be converted into a natural forest and the every possible support will be extended to grow trees found in natural forests in the selected extent of land.
- h. By the establishment of an Ayurveda Research and Treatment Centre, working in the fields targeting ancient Ayurvedic treatment methods, traditional healing (kem) systems and mental relaxation.

### **Units to be built within training centers**

- a. Education, seminar unit and conference hall
- b. Audiovisual multimedia unit and library
- c. Computer unit
- d. Leadership, yoga, meditation and spiritual development unit
- e. Sports, aesthetics and performing arts unit

- f. Outbound training and education unit
- g. Agricultural and Livestock site
  - Crop cultivation
  - Beekeeping
  - Grazing areas for milk cows
  - Goat pen
  - Nurseries
  - Organic fertilizer Compost/biogas unit
  - Dehydration unit
- h. Gymnasium
- i. Ayurveda unit
- j. Hostel for academic/non-academic staffs and participants
- k. Information Centre
- l. Administrative Office
- m. Staff restroom
- n. Warehouse
- o. Open-air theatre
- p. Car park and bicycle yard
- q. Observation towers and resting places
- r. Toilets/urinals, wash rooms

**We expect those who are interested in this project and those who love our fatherland and those who think that healthy living lives should be created by combining agriculture with other sectors while enhancing educational, agricultural and computer capabilities, will -**

- a. **Contribute human resources on a voluntary basis (sharing knowledge and experiences with us and help us to build national/ international relationships.)**
- b. **Donate physical resources (material donations)**
- c. **Extend financial sponsorship/ financial donations.**

### **Third Step**

As the third step, such support is also needed for the programme to extend this project to cover the entire island.

In particular, we expect those Sri Lankans living overseas to be magnanimous towards us.

Our contact details including phone numbers, email addresses and other details as well as the website of the Samadhi Foundation and bank account details for remitting your contributions are given below.

Should you need any further information/clarification, please feel free to contact us using any of the above communication methods.

## **Bank Details for Your Donations**

**Our Account Name** Samadhi Community Development Foundation

**Our Account Number** 0010 6000 0251

**Bank** Sampath Bank - Sri Lanka

**Bank Code** 7278

**Branch** Matara

**Branch Code** 010

**Swift Code** BSAMLKLX

### **Annex 1**

#### **Crop cultivation model project**

(a) Herb cultivation model project

1. දෙහි - Citrus limon
2. කස්තුරි දෙහි -
3. නාරං -
4. යකි නාරං - Atlantia zeylancia
5. දෙවැමි -
6. බෙලි -

7. නෙල්ලි - *Emblica indica*
8. සියඹලා - *Tamarindus indica*
9. වානහංග -
10. අගුණ -
11. රණවරා - *Cassia auriculata*
12. කුරුඳු - *Cinamomum dubium*
13. සාදිකකා - *Myristica fragrans*
14. කරාබු -
15. ඉරමුසු - *Hemidesmus indicus*
16. මහ හැඩයා - *Lycopodium phlegmaria*
17. කුඩා හැඩයා -
18. බිං කොහොඹ -
19. ගජමදාරා -
20. සප්පද - *Aristolochia indica*
21. කොබෝ තීල -
22. රුක් අහන - *Alangium salvifolium*
23. මුණමල් -
24. රත් හඳුන් - *Pterocarpus santalinus*
25. සුදු හඳුන් - *Santalum album*
26. උදුපියලිය -
27. හානවාරිය - *Asparagus gonoclads*
28. කරපිංචා - *Murraya koenigii*
29. කටුපිල - *Flueggea leucopyrus*

30. ඉහුරු - Ginger root
31. කහ - Curcuma long
32. කොහිල - Lasia spinosa
33. කළු කොහිල - Black lasia spinosa
34. වල් කොහිල - Syngonium podophyllum
35. පොල්පලා - Aerva lanata (L) jussex
36. කඳුලැස්ස - Drosera Indica (sundew)
37. නිරමුල්ලිය - Asteracantha longifolia
38. ගොඩකඳුර - Strychnosnux vomica
39. ලුනුවිල - Bacopamonneri
40. වැල්පෙනල - Cardiospermum halicabum
41. සාරණ - Trianthea monogyna
42. පිටසුදු සාරණ - Boerhavia diffusa
43. කිරිමුදු වැල් - Merremia umbellate
44. කිරි හැන්ද - Celosia argentea
45. රතු කිරිහැන්ද - Celosia argentea
46. කලාදුරු - Cyperus rotundus
47. කපු කිස්ස - Abelmoschus moschatus
48. අරුද - Ruta graveolens
49. කෝමාරිකා - Aloe vera
50. රතු කෝමාරිකා - Red aloe vera
51. රත්කිහිරිය - Acacia catech
52. එල මිලිද - Abrus melanospermus

53. කුප්පමෙනියා - *Acalipha linn*
54. මලිඳ - *Abrus precatorius*
55. රත්කහිරිය - *Acacia catechu*
56. වඳකහ - *Acorus calamus*
57. බෙහෙත් අනෝද - *Abutilon indicum*
58. කිඩාරම් - *Amorphophallus campanulatus*
59. ආඩනෝඩ - *Astma bashak*
60. සැවැන්දරා - *Andropogon muricatum*
61. ඊතන - *Andropogon contortus*
62. කිරි අහණ - *Dregea volubillis*
63. නික - *Vitex negundo*
64. වඳුරු මැ - *Mucuna pruriens*
65. අරඵ - *Terminalia chebula*
66. සේර -
67. රසකිඳ - *Tinospora cordifolia*
68. නල - *Seamum*
69. කමුඳු - *Nymphoides indica*
70. කඵනික - *Cinamomum iteodaphne*
71. ගොඩපර - *Dillenia indica*
72. සත කුප්ප - *Peucedanumjraveolens*
73. ප්‍රානඵව - *Desmodiumgyrans*
74. නිල්අවරිය - *indigoferatinctoria*
75. වැල්මි - *Glycyrhiza glabra*

76. බුඵ - Terminalia Bellirica
77. සඳුරාජ - Anoectochilus cetceus
78. චන් රාජ - Jewel orchid
79. ඉරුරාජ - Zeuxineregia
80. ඇහල - Hemidesmusindicus
81. කටුවැල්බටු - Solanum xanthocarpum
82. කොතලහිඹටු - Salacia reticulate
83. කොකුම් - Kokunazeylanicum
84. කොබෝලීල - Bauhinia variegata
85. රත්කිරිගොටු - Cleme viscosa
86. කරාබුනැටි - Syzgium eugenia
87. තේත්තපලමන් -
88. තුඹ කරවිල - Momordica cochichinensis
89. තුඹුක් - Terminalia arjuna
90. ඒකාවේරිය - Rauwolfia serpentina
91. මස්බැඳ්ද - Gymnema sylvestre
92. ගිරිනිල්ල - Argyreia nervosaargyreia
93. පත්කැල - Butca frondosa
94. සුදු තෙරුම් -
95. හිගුරුපියලිය - kaempferia galanga
96. එලවරා - Calotrio
97. විෂ්ණුකාන්ත - Evolvulus alsinoides
98. ගොඩපර - Dillenia retusa

99. අලුපුහුල් - *Benincasa hispida*
100. මයිල - *Bauhinia racemosa*
101. කැහිපිත්තන් - *Cissampelos pariteta linn*
102. බිම්පොල් - *Trichopus zeylanicus*
103. අක්මැල්ල - *spilanthus*
104. මොණරකුඩිම්බිය - *Vernonia cinerea*
105. මුඩමහන - *Sphaeranthus indicus*
106. දුටුසපුට - *Centranthera indica*
107. හීන් තඹල - *Ehretia boxipoli*
108. නිප්පිලි - *Piper longum*
109. දුහුදු - *Celastrus paniculatus*
110. කොත්තමල්ලි - *Coriandrum sativum*
111. කොහොඹ - *Azadirachta indica*
112. පෙරුම්කායන් - *Ferula foetida*
113. දිවිපහුරු - *Ipomoea pestiridis*
114. මැල්ල -
115. කිරිපඬු -
116. රත්තටුල් - *Plumbago indica*
117. බඩකිරිල්ල -
118. ආපසුමුදු -
119. මහරත්මල් -
120. රම්මානිස්ස - *Cleome viscosa*
121. තුම්බෝ අත්තන - *Datura fastuosa*

122. මිනී මල් - *Vincarosea catharanthus roseus*
123. කොකුම් - *Garcinia indica*
124. රණවරා - *Cassia auriculata*
125. බෝ මී - *Litsaea sebifera*
126. හීන බෝවිටියා - *Obeckia octandra*
127. නිල්නිටුල් - *Plumbago capansis*
128. බාජලි - *Hordeum Vulgare*
129. ලුනුවිල - *Bacopa monnieri*
130. කිරිබඳු අල -
131. දාරිහරිලා - *Berberis ceylanica schnei*
132. නියගලා - *Indigofera*
133. උඳිහාල් - *Trigonella foenum graecum*
134. නිකමල් - *Vitex trifolia*
135. නාගස - *Mesua nagassarium*
136. නෙඳිම - *Nelumbo nucifera*
137. කරද - *Pongamia pinnata*
138. එරබඳු -
139. ගස්පෙනෙල - *Sapindus drummondii*
140. අඟු - *Morinda citrifolia*
141. මාදං - *Syzygium cumini*
142. අමුක්කාරි - *Withania somnifera*
143. නගාමැරු අල - *Ipsea speciosa*
144. හල් - *Vateria copalipera*

145. රදලිය - *Connarus monocarpus*
146. එළ රත්මල් - *Lxora yellow*
147. වල්දෙල් - *Artocarpus mariannensis*
148. කිනිහිරිය - *Cochlosperum gossipyum*
149. සිවිය වැල් - *Piper chaba*
150. වල් බීං කොහොඹ ( කාල මේස) - *Andrographis paniculata*
151. පත්කැල - *Erythrima suberosa*
152. නිබ්බු - *Solanum indica*
153. පිටවක්කා - *Phyllanthus amaru*
154. මලින - *Gymnema sylvestre*

(b) Vegetable cultivation model project

1. මුරුංගා - *Moringa oleifera*
2. කතුරු මුරුංගා -
3. තක්කාලි - *Solanum lycopersicum*
4. තම්පලා -
5. කුර තම්පලා - *Amaranthus viridis*
6. රතු තම්පලා - *Amaranthus oleraceus*
7. කටු තම්පලා -
8. කෝවක්කා - *Coccinia grandis*
9. නිවිනි - *Basella alba* (Ceylon spinach Malabar rightshade)
10. වම්බු - *Solanum melongena*

11. වැටකොළා - *Gisuri\_dodka*
12. රතුගෝවා - *Brassica leracia*
13. මාළු මිරිස් - *Capsicum kadal*
14. බෝංචි - *Vicia faba* (Field beans)
15. බණ්ඩක්කා - *Abelmoschus esculentus*
16. වට්ටක්කා - *Cucubita pepo*
17. හතු -
18. කැරට් - *Carrots*
19. රාබු - *Raphanus sativus*
20. පිපිඤ්ඤා - *Cucumis sativus*
21. නෙළුම් අල - *Nelumbium nelumbo*
22. හේන් වැටකොළා - *Horti tanuvari*
23. පනෝල - *Luffa trichosanthes*
24. වැටකොළා - *Luffa acutangula*
25. අළු පුහුල් - *Benincasa hispida*
26. මෑකරල් -
27. බීටරුට් -
28. තුඹ -
29. ගැට තුඹ -

(c) Fruit cultivation model project

1. පැහැන්

2. දුරියන්
3. මැන්ගුස්
4. රඹුටන් - *Pouteria sapota*
5. ජම්බු
6. පිනි ජම්බු
7. දොඩම්
8. සීනි කෙසෙල්
9. රත් කෙසෙල්
10. කෝලිකුටු
11. ආනමාච්ච
12. සුවදැල්
13. ඇඹුල් කෙසෙල්
14. සැපදිල්ලා
15. උගුරැස්ස
16. අන්නාසි - *Ananas comosus*
17. අලිගැටපේර - *Percea americana*
18. නම්නං
19. අඹ - Mang
20. ගස්ලබු
21. පේර - *Guava*

22. ඇඹුල් පේර
23. කටු අනෝදා
24. වැලි අනෝදා - *Annona squamosa*
25. මසං
26. ගස්ලබු - *Carica Papaya*
27. දොඩම් - *Citrus sinensis*
28. කලු උක් - *Saccharum officinarum*
29. බුල් ඇපල් - *Bombae apple*
30. දිවුල් - *Feronia elephantum*
31. උගුරුස්ස - *Flacourita cataphracta*
32. මොර - *Longanfruits*
33. සැපනිල්ලා - *Manilkara zapota*
34. වෙරඵු - *Elaeocarpus serratus*
35. කාමරංකා - *Averrhoa carambola*
36. කරද
37. කිරල - *Sanneratia caseolaris*
38. මසං - *Ziziphus jujube*
39. මා දං - *Syzygium cumini*
40. මුගන් ෆාට් - *Hylocereus undatus*
41. මිදි - *Vitis vinifera*

42. ලීච්චි - Litchi chinensis

43. පළු - Manikara hexandr

(d) Yam cultivation model project

1. වැල් අල - Dioscorea alata
2. වැල් අල - Dioscorea rotundata
3. අරනාපල්
4. කිරිඟබල - Colocasia esculenta
5. හුලකිරිය - Maranta arundinacea
6. කොඩොල් - Dioscorea oppositifolia
7. කටු අල - Dioscorea pentaphylla
8. හිරි තල - Dioscorea obouneta
9. බතල - Sweet otatoes
10. රාජාල - Dioscorea alata
11. ජාවාල - Coleus rotundifolius
12. මඤ්ඤොක්කා - Manihot utilissima
13. කිරිකොඩොල - Dioscorea villosa
14. කහටල - Colocasia nymplimfolia
15. දෙහි අල - Colocasia sp.
16. බුත්සරණ - Buthsarana

17. හිහරල - *Colocasia nymplimfolia*
18. දන්දිල
19. රටකඡු - *Arachis hypogaeapnut*
20. ඉත්තල

(e) Green leaves cultivation model project

1. ගොටුකොළ - *Centella asiatica*
2. තෙඹු - *Costus specious*
3. ගිරිපලා - *Commelina\_diffusa*
4. මුකුණුවැන්නා - *Alternathera sessilis*
5. කංකුං
6. මල්පලා
7. කෙත්කොළ
8. ඇඹුල් ඇඹිලිය
9. කරකොළ
10. තණ පලා

(f) Model projects for the cultivation of other plants

1. දෙල්
2. කොස්
3. වල්දෙල්

4. පොල්
5. කෝපි
6. ගොරකා - *Garcinia cambogia*
7. කටරොඵෑ
8. පුවක්
9. බුලත්
10. කොච්චි
11. ගමමිරිස්
12. එච්චර මිරිස්
13. මිරිස්
14. රම්පේ
15. සේර
16. ඇඹරුල්ලා
17. තැඹිලි
18. කුන්දිරා - *Kundira*
19. මිකඩ
20. ඉද්ද