FEDERATION OF ASIAN ORGANIZATIONS FOR RADIATION ONCOLOGY (FARO)

ICARO 2, vienna, 20-23 June 2017
Table 1
Summary of actual status and total needs to provide full access to radiotherapy in the different regions of the world

<table>
<thead>
<tr>
<th></th>
<th>Africa</th>
<th>Asia Pacific</th>
<th>Europe</th>
<th>Latin America</th>
<th>North America</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population and courses</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population (million)</td>
<td>1070</td>
<td>4108</td>
<td>893</td>
<td>601</td>
<td>350</td>
</tr>
<tr>
<td>Actual radiotherapy courses</td>
<td>148600</td>
<td>1914454</td>
<td>1712000</td>
<td>503000</td>
<td>934746</td>
</tr>
<tr>
<td>Total radiotherapy courses</td>
<td>437624</td>
<td>3277387</td>
<td>1884893</td>
<td>573385</td>
<td>934746</td>
</tr>
<tr>
<td>Resources</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Actual radiotherapy centres</td>
<td>140</td>
<td>2585</td>
<td>1431</td>
<td>620</td>
<td>2787</td>
</tr>
<tr>
<td>Total radiotherapy centres needed for full access (working 12 h/day)</td>
<td>407</td>
<td>3503</td>
<td>1449</td>
<td>624</td>
<td>1200</td>
</tr>
<tr>
<td>Actual megavoltage machines</td>
<td>277</td>
<td>3894</td>
<td>3751</td>
<td>968</td>
<td>4243</td>
</tr>
<tr>
<td>Percentage cobalt machines</td>
<td>30.0%</td>
<td>19.8%</td>
<td>16.0%</td>
<td>30.1%</td>
<td>3.6%</td>
</tr>
<tr>
<td>Total megavoltage machines needed for full access (working 12 h/day)</td>
<td>813</td>
<td>6406</td>
<td>4098</td>
<td>1106</td>
<td>2175</td>
</tr>
<tr>
<td>Actual coverage of the needs</td>
<td>34%</td>
<td>61%</td>
<td>92%</td>
<td>88%</td>
<td>195%</td>
</tr>
<tr>
<td>Costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capital + training costs needed to bring to full access (million US$)</td>
<td>2118</td>
<td>10497</td>
<td>2573</td>
<td>918</td>
<td>1558</td>
</tr>
<tr>
<td>Actual operational costs/year (million US$)</td>
<td>182</td>
<td>4638</td>
<td>5868</td>
<td>975</td>
<td>6151</td>
</tr>
<tr>
<td>Total operational costs/year (million US$), assuming full access</td>
<td>571</td>
<td>6968</td>
<td>6573</td>
<td>1192</td>
<td>6588</td>
</tr>
<tr>
<td>Actual cost per radiotherapy course (US$)</td>
<td>1226</td>
<td>2423</td>
<td>3428</td>
<td>1939</td>
<td>6581</td>
</tr>
<tr>
<td>Total cost per radiotherapy course (US$), assuming full access</td>
<td>1306</td>
<td>2126</td>
<td>3487</td>
<td>2079</td>
<td>7048</td>
</tr>
</tbody>
</table>
The Background:

**ASIA ....**

is a Major Part of the Global Community (60%)
ASIA ..... is the Most Heterogeneous Region (GNP)

2016 Nominal GDP and PPP list by the International Monetary Fund\(^{[50]}\) (sortable; in billions of $US)

<table>
<thead>
<tr>
<th>Country or territory</th>
<th>GDP nominal billions of USD</th>
<th>GDP (PPP) billions of USD</th>
<th>GDP (PPP) per capita USD</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bangladesh</td>
<td>226.257</td>
<td>620.376</td>
<td>3,391</td>
<td>South Asia</td>
</tr>
<tr>
<td>China (PRC)</td>
<td>11,383.033</td>
<td>20,853.331</td>
<td>13,224</td>
<td>East Asia</td>
</tr>
<tr>
<td>India</td>
<td>2,288.715</td>
<td>8,642.758</td>
<td>5,808</td>
<td>South Asia</td>
</tr>
<tr>
<td>Indonesia</td>
<td>936.955</td>
<td>3,010.746</td>
<td>10,651</td>
<td>Southeast Asia</td>
</tr>
<tr>
<td>Japan</td>
<td>4,412.603</td>
<td>4,901.102</td>
<td>37,519</td>
<td>East Asia</td>
</tr>
<tr>
<td>South Korea</td>
<td>1,321.196</td>
<td>1,916.439</td>
<td>35,379</td>
<td>East Asia</td>
</tr>
<tr>
<td>Malaysia</td>
<td>309.262</td>
<td>859.881</td>
<td>25,145</td>
<td>Southeast Asia</td>
</tr>
<tr>
<td>Philippines</td>
<td>310.312</td>
<td>793.193</td>
<td>6,974</td>
<td>Southeast Asia</td>
</tr>
<tr>
<td>Singapore</td>
<td>294.560</td>
<td>484.951</td>
<td>83,066</td>
<td>Southeast Asia</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>74.924</td>
<td>236.471</td>
<td>10,410</td>
<td>South Asia</td>
</tr>
<tr>
<td>Thailand</td>
<td>404.824</td>
<td>1,152.421</td>
<td>15,579</td>
<td>Southeast Asia</td>
</tr>
</tbody>
</table>

http://mecometer.com/image/worldmap-mono/gdp-per-capita-ppp.png
The **DIVERSEs of ASIA Countries (Population)**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>China</td>
<td>1,370,793,000</td>
<td>31.35</td>
<td>0.49</td>
<td>6</td>
<td></td>
<td></td>
<td>0.944</td>
<td>▲ 0.002</td>
</tr>
<tr>
<td>2</td>
<td>India</td>
<td>1,299,499,000</td>
<td>29.72</td>
<td>1.64</td>
<td>15</td>
<td></td>
<td></td>
<td>0.935</td>
<td>▲ 0.002</td>
</tr>
<tr>
<td>3</td>
<td>Indonesia</td>
<td>255,462,000</td>
<td>5.84</td>
<td>1.41</td>
<td>1</td>
<td></td>
<td></td>
<td>0.923</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Bangladesh</td>
<td>158,762,000</td>
<td>3.63</td>
<td>1.37</td>
<td>2</td>
<td></td>
<td></td>
<td>0.922</td>
<td>▲ 0.002</td>
</tr>
<tr>
<td>7</td>
<td>Japan</td>
<td>126,891,000</td>
<td>2.81</td>
<td>-0.01</td>
<td>9</td>
<td></td>
<td></td>
<td>0.916</td>
<td>▲ 0.001</td>
</tr>
<tr>
<td>8</td>
<td>Philippines</td>
<td>102,965,000</td>
<td>2.28</td>
<td>2.13</td>
<td>2</td>
<td></td>
<td></td>
<td>0.916</td>
<td>▲ 0.004</td>
</tr>
<tr>
<td>12</td>
<td>Thailand</td>
<td>68,387,000</td>
<td>1.51</td>
<td>0.76</td>
<td>2</td>
<td></td>
<td></td>
<td>0.915</td>
<td>▲ 0.002</td>
</tr>
<tr>
<td>14</td>
<td>South Korea</td>
<td>50,617,000</td>
<td>1.12</td>
<td>0.38</td>
<td>2</td>
<td></td>
<td></td>
<td>0.910</td>
<td>▲ 0.002</td>
</tr>
<tr>
<td>18</td>
<td>Malaysia</td>
<td>31,032,000</td>
<td>0.89</td>
<td>1.84</td>
<td>1</td>
<td></td>
<td></td>
<td>0.907</td>
<td>▲ 0.002</td>
</tr>
<tr>
<td>25</td>
<td>Sri Lanka</td>
<td>20,689,000</td>
<td>0.46</td>
<td>0.94</td>
<td>2</td>
<td></td>
<td></td>
<td>0.899</td>
<td></td>
</tr>
<tr>
<td>36</td>
<td>Singapore</td>
<td>5,541,000</td>
<td>0.12</td>
<td>1.30</td>
<td>1</td>
<td></td>
<td></td>
<td>0.891</td>
<td>▲ 0.001</td>
</tr>
<tr>
<td>17</td>
<td>Korea, South</td>
<td>88,888,000</td>
<td>0.894</td>
<td>0.894</td>
<td>18</td>
<td></td>
<td></td>
<td>0.894</td>
<td>▲ 0.001</td>
</tr>
<tr>
<td>19</td>
<td>Luxembourg</td>
<td>88,922,000</td>
<td>0.892</td>
<td>0.002</td>
<td>19</td>
<td></td>
<td></td>
<td>0.892</td>
<td>▲ 0.002</td>
</tr>
<tr>
<td>20</td>
<td>Japan</td>
<td>89,189,000</td>
<td>0.891</td>
<td>0.001</td>
<td>20</td>
<td></td>
<td></td>
<td>0.891</td>
<td>▲ 0.001</td>
</tr>
</tbody>
</table>
Wide Variability in Access to Radiotherapy

Current condition
Meeting for setting up the Asian Radiation Oncology Federation

With Prof V Valentini (ESTRO President), Prof Hiraoka (JASTRO President), Prof Nakano (Japan)

Societies of 11 Asian countries officially agreed to the establishment of FARO, and they agreed that FARO would first focus on the academic/scientific exchange and human resource development.

Also during this meeting, FARO Officers were elected.
• FARO is a non-profit and scientific organization which is intended to function as a federation of radiation oncology societies in Asia and aims to foster the role of radiation oncology to improve the basic level of radiotherapy for the benefit of the patients in the Asian region.
FIRST STRUCTURE

- Prof. Masahiro Hiraoka (JASTRO)-President
- Prof. Ramesh Bilimagga (AROI)-Vice President
- Prof. Takashi Nakano (JASTRO)-Secretary General
- Prof. Xianshu Gao (CSRO)-Treasurer
- Prof. Soehartati Gondhowiardjo (IROS)-President-Elect
- Dr. Tomoaki Tamaki (JASTRO)-Deputy Secretary General.

Member countries:
- Bangladesh
- China
- India
- Indonesia
- Japan
- Korea
- Malaysia
- Philippines
- Singapore
- Srilanka
- Thailand
FARO Members

1. Bangladesh: Bangladesh Society of Radiation Oncologists (BSRO)
2. China: Chinese Society of Therapeutic Radiation Oncology (CSTRO)
3. India: Association of Radiation Oncologist of India (AROI)
4. Indonesia: Indonesia Radiation Oncology Society (IROS)
5. Japan: Japanese Society for Radiation Oncology (JASTRO)
6. Korea: Korean Society for Radiation Oncology (KOSRO)
7. Malaysia: Malaysian Oncological Society (MOS)
8. Philippines: Philippine Radiation Oncology Society (PROS)
10. Sri Lanka: Sri Lanka College of Oncologist (SLCO)
11. Thailand: Thai Society of Therapeutic Radiology and Oncology (THASTRO)
The aims and purposes of the Federation are:

a) To **promote the co-operation and communication** between Radiation Oncology Organizations in the region;

b) To develop the **standard of education/training and research** in radiation oncology and related field in the region;

c) To promote the **advancement in status and standard of practice** of the radiation oncology profession;

d) To organize and/or sponsor **international conferences, regional and other meetings or courses**

e) To **collaborate or affiliate with other** scientific or professional Organizations globally
Announcement of the establishment of FARO and the CONSTITUTION

Press Conference 15th ICRR 2015 ... JASTRO

Annual meeting 2015 29th May 2015 ... 21st November 2015, Kyoto

1st Council Meeting ..... 2nd Council Meeting

2015

29th May 2015 ..... 21st November 2015, Kyoto
Presentation Outline

INPUT
- Where are we now?
  - FARO’s History
  - FARO’s Challenges
  - FARO’s Members
  - FARO’s Current Status

PROCESS
- How do we get there?
  - FARO’s Workplan

OUTPUT
- Where are we going to go?
  - FARO’s Vision
- Are we there yet?
  - FARO’s Structure
- IMPACT
  - FARO’s Missions
- OUTCOME
  - FARO’s Activities
  - FARO’s Reports
  - FARO’s Publications
To foster the role of radiation oncology to improve the basic level of radiotherapy for the benefit of the patients in the Asian region.
PRESENT STRUCTURE

- Prof. Soehartati Gondhowiuardjo –President
- Dr. Ivan Tham (Singapore) - Vice President
- Prof. Takashi Nakano (JASTRO) - Secretary General
- Prof. Xianshu Gao (CSRO) - Treasurer
- Prof. Shyam Shrivastava (India) - President-Elect
- Dr. Tomoaki Tamaki (JASTRO) - Deputy Secretary General.

Member countries:
- Bangladesh
- China
- India
- Indonesia
- Japan
- Korea
- Malaysia
- Philippines
- Singapore
- Sri Lanka
- Thailand
- Pakistan
World Population : 7 B people
Asia Population : 4.478.315.164
FARO Population : 3.762.526.250

ASIA → 60 % of World Population
FARO → 84% OF ASIA Population
FARO → 53 % of World Population
Radiotherapy as part of main modality

Summary statistics (2012)

<table>
<thead>
<tr>
<th>SOUTH-CENTRAL ASIA</th>
<th>Male</th>
<th>Female</th>
<th>Both sexes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population (thousands)</td>
<td>930527</td>
<td>884057</td>
<td>1815184</td>
</tr>
<tr>
<td>Number of new cancer cases (thousands)</td>
<td>711.8</td>
<td>802.0</td>
<td>1514.0</td>
</tr>
<tr>
<td>Age-standardised rate (W)</td>
<td>98.4</td>
<td>103.3</td>
<td>100.1</td>
</tr>
<tr>
<td>Risk of getting cancer before age 75 (%)</td>
<td>10.0</td>
<td>10.7</td>
<td>10.7</td>
</tr>
<tr>
<td>Number of cancer deaths (thousands)</td>
<td>533.0</td>
<td>490.4</td>
<td>1023.4</td>
</tr>
<tr>
<td>Age-standardised rate (W)</td>
<td>74.8</td>
<td>64.7</td>
<td>69.3</td>
</tr>
<tr>
<td>Risk of dying from cancer before age 75 (%)</td>
<td>9.3</td>
<td>7.0</td>
<td>7.6</td>
</tr>
<tr>
<td>5-year prevalent cases, adult population (thousands)</td>
<td>1069.2</td>
<td>1781.2</td>
<td>2850.4</td>
</tr>
<tr>
<td>Proportion (per 100,000)</td>
<td>165.7</td>
<td>287.5</td>
<td>225.3</td>
</tr>
</tbody>
</table>

5 most frequent cancers (ranking defined by total number of cases)

- Lung
- Lip, oral cavity
- Stomach
- Colorectum
- Oesophagus

- Breast
- Cervix uteri
- Lip, oral cavity
- Ovary

Source: GLOBOCAN (IARC) Section of Cancer Surveillance
## Radiotherapy In OUR REGION

<table>
<thead>
<tr>
<th>No</th>
<th>Negara</th>
<th>Population in Million</th>
<th>Total Machines</th>
<th>1 equipment / M pop</th>
<th>no equipment / 1 M pop</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Japan</td>
<td>126</td>
<td>841</td>
<td>1 : 0.15</td>
<td>6.67</td>
</tr>
<tr>
<td>2</td>
<td>South Korea</td>
<td>50</td>
<td>136</td>
<td>1 : 0.3</td>
<td>3.33</td>
</tr>
<tr>
<td>3</td>
<td>Singapore</td>
<td>6</td>
<td>20</td>
<td>1 : 0.3</td>
<td>3.33</td>
</tr>
<tr>
<td>4</td>
<td>Thailand</td>
<td>68</td>
<td>76</td>
<td>1 : 0.39</td>
<td>2.56</td>
</tr>
<tr>
<td>5</td>
<td>China</td>
<td>1.386</td>
<td>2140</td>
<td>1 : 0.65</td>
<td>1.53</td>
</tr>
<tr>
<td>6</td>
<td>Malaysia</td>
<td>31</td>
<td>47</td>
<td>1 : 0.66</td>
<td>1.51</td>
</tr>
<tr>
<td>7</td>
<td>Srilanka</td>
<td>20</td>
<td>14</td>
<td>1 : 1.43</td>
<td>0.699</td>
</tr>
<tr>
<td>8</td>
<td>Philippines</td>
<td>103</td>
<td>36</td>
<td>1 : 2.26</td>
<td>0.44</td>
</tr>
<tr>
<td>9</td>
<td>India</td>
<td>1.342</td>
<td>589</td>
<td>1 : 2.27</td>
<td>0.44</td>
</tr>
<tr>
<td>10</td>
<td>Indonesia</td>
<td>263</td>
<td>80</td>
<td>1 : 3.26</td>
<td>0.30</td>
</tr>
<tr>
<td>11</td>
<td>Bangladesh</td>
<td>164</td>
<td>25</td>
<td>1 : 6.56</td>
<td>0.15</td>
</tr>
<tr>
<td>12</td>
<td>Pakistan</td>
<td>196</td>
<td>29</td>
<td>1 : 6.89</td>
<td>0.14</td>
</tr>
</tbody>
</table>


India: P: 1338 M M: 589 Ratio: 1:2.27

Srilanka: P: 20 M M: 14 Ratio: 1:1.43
Radiation Oncologist, Centers, Equipments

Data from FARO societies in 2014

<table>
<thead>
<tr>
<th>Country</th>
<th>Population (in million)</th>
<th>Centers</th>
<th>RT Machines</th>
<th>People Treated/Yr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indonesia</td>
<td>263</td>
<td>33</td>
<td>80</td>
<td>914885</td>
</tr>
<tr>
<td>Malaysia</td>
<td>31</td>
<td>30</td>
<td>47</td>
<td>20000</td>
</tr>
<tr>
<td>South Korea</td>
<td>50</td>
<td>86</td>
<td>136</td>
<td>49668</td>
</tr>
<tr>
<td>Japan</td>
<td>126</td>
<td>700</td>
<td>841</td>
<td>190322</td>
</tr>
<tr>
<td>China</td>
<td>1.386</td>
<td>1579</td>
<td>2140</td>
<td>570000</td>
</tr>
<tr>
<td>Philippines</td>
<td>103</td>
<td>36</td>
<td>36</td>
<td>20000</td>
</tr>
<tr>
<td>Singapore</td>
<td>6</td>
<td>7</td>
<td>20</td>
<td>6700</td>
</tr>
<tr>
<td>Thailand</td>
<td>68</td>
<td>34</td>
<td>76</td>
<td>36174</td>
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<tr>
<td>India</td>
<td>1.342</td>
<td>365</td>
<td>589</td>
<td>660000</td>
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<tr>
<td>Bangladesh</td>
<td>164</td>
<td>22</td>
<td>25</td>
<td>12000</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>20</td>
<td>7</td>
<td>14</td>
<td>9000</td>
</tr>
<tr>
<td>Pakistan</td>
<td>196</td>
<td>29</td>
<td>29</td>
<td>560</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>3.760</strong></td>
<td><strong>2928</strong></td>
<td><strong>4033</strong></td>
<td><strong>1.587.949</strong></td>
</tr>
</tbody>
</table>

• FARO Population: 3.76 Billion
• ROS: 13.889
• Machines: 4033 (BT 928)
• Number of Patients Treated/year: 1.587.949 Patients

IINEQUALITY DISTRIBUTION
<table>
<thead>
<tr>
<th>NO</th>
<th>Country</th>
<th>Duration</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Thailand</td>
<td>3</td>
<td>National model developed based on US and UK</td>
</tr>
<tr>
<td>2</td>
<td>Singapore</td>
<td>5</td>
<td>Follows UK / Australian Models (FRCR / FRANZCR)</td>
</tr>
<tr>
<td>3</td>
<td>Philippines</td>
<td>4</td>
<td>Follows US Model (ACGME)</td>
</tr>
<tr>
<td>4</td>
<td>Indonesia</td>
<td>3.5</td>
<td>National system follows IAEA TCS-36</td>
</tr>
<tr>
<td>5</td>
<td>Malaysia</td>
<td>4</td>
<td>Master of Clinical Oncology, Sylaabus Follow FRCR (UK)</td>
</tr>
<tr>
<td>6</td>
<td>India</td>
<td>5</td>
<td>National System</td>
</tr>
<tr>
<td>7</td>
<td>Bangladesh</td>
<td>5</td>
<td>Follows UK Models</td>
</tr>
<tr>
<td>8</td>
<td>China</td>
<td>3</td>
<td>National System (3yr General Residency+3yr Radiation Oncologist tr.)</td>
</tr>
<tr>
<td>9</td>
<td>Japan</td>
<td>7</td>
<td>National System (JASTRO + JRS)</td>
</tr>
<tr>
<td>10</td>
<td>Korea</td>
<td>4</td>
<td>National System</td>
</tr>
<tr>
<td>11</td>
<td>Sri Lanka</td>
<td>4 – 5</td>
<td>Clinical Oncologist</td>
</tr>
<tr>
<td>12</td>
<td>Pakistan</td>
<td>6</td>
<td>National System (4yr post FCPS+MCPS)</td>
</tr>
</tbody>
</table>
Presentation Outline

**INPUT**
- Where are we now?
  - FARO’s History
  - FARO’s Challenges
  - FARO’s Members
  - FARO’s Current Status

**PROCESS**
- How do we get there?

**OUTPUT**
- FARO’s Activities
- FARO’s Reports
- FARO’s Publications

**EVALUATION**
- Are we there yet?
  - FARO’s Vision

**OUTCOME**
- IMPACT
  - Where are we going to go?
  - FARO’s Missions

**FARO’s Workplan**
STRATEGIC PLAN MAPPING

VISION

Improve the basic level of radiotherapy for the benefit of the patients in the Asian region

BUDGETING

Sustainable Funding Allocation

ORGANIZATION

FARO Structural team and Job Description

REGULATION

FARO By Laws

STRATEGIC APPROACH

Facilitate the exchange of expertise within the region / mentoring

Establish and promote Consensus Therapy Guidelines in contouring

Utilize web based telecomunication for efective and efficient collabotion, peer, young and residents

Maintain and strengthen collaboration with IAEA (RCA IAEA ESTRO SEAROG) and other international org

RESOURCES

Develop Multinational Research and Data Collection

Identify innovative strategies to close the GAP in Facilities / infrastructure and HR

Improve the Skill and Knowledge of Radiation Oncologists by Continuing Medical Education Annually

Empowering of young RO through development of LEADERSHIP
FARO ACTIVITIES and PLANNED ACTIVITIES

Step I (2014-2016)
- Capacity building
- Brainstorming and preparation and set up of the group
- Establish and existence to the world
- Communication and collaboration with IAEA, ESTRO, ASTRO

- Strengthening and empowering **internally**
  - E-NETWORKING / TELECOMMUNICATION
    - Data collection as a part of RESEARCH ACTIVITIES
    - Organizational discussion
    - Bottom up plan of activities /
      - Annual scientific meeting
      - Collaboration – IAEA and ESTRO
      - Contouring class
      - Leadership workshop
  - Gap analysis in our region and find the solution to close the gap
  - Exchange fellow
  - Task forces ......

Step II (2017-2018)
- Continuing the development of the organization
- Improving the organization programs
Role in Education and Professional Development

CPD / CME: Faro Scientific Meetings
Training / educational courses

Trainee Education: Bridge the gap of expertise supply and demand between member countries
Education Training

Self Evaluation will be Needed

• Which level of skillset are we aiming for as a region? (IAEA TCS 36)
  – Level 1: Basic 2D RT, brachytherapy with standard loading, simple mouldroom techniques
  – Level 2: Intermediate level of planning (simulator with patient contouring or CT Simulator), basic 3D, brachytherapy with individualized planning
  – Level 3: Complex treatment planning, image based BT, etc

• General (ability to work in all ASIA scenarios) vs Focused (ability to work in low-resource setting OR high-resource setting) ??
• Assessment of competence, recognition → national vs regional board examination ??
• Endorse and Promote IAEA TCS 36..
• **What infrastructure do we have (to support training)?** *(IAEA TCS 36):*

  -- **Mandatory for levels 1-2:**
  * At least 2 MV units (Cobalt/linac)
  * *(Preferably HDR)* Brachytherapy unit
  * Simulator, either conventional or CT
  * TPS
  * Mould room
  * Equipments for dosimetry and QA

  -- **Desirable for level 3:** *(not mandatory even for level 3)*
  * Facilities to execute 3DCRT, IMRT, SRS/SRT, etc
  * Tumor biology / radiobiology lab
Developed Member Countries

Curriculum focus: International competitiveness
Predominantly Level III training experience (TCS-36)

Developing Member Countries

Curriculum focus: Applicable competencies
Readiness to practice in low-resource

FARO

- Provide database of a roster of experts and training institutions as for educational/training resources in FARO \[\rightarrow\] EXCHANGE FOR SPECIAL TOPICS, ex: SBRT, HEAVY ION/PROTON THERAPY; FELLOWSHIP PROGRAM

- Adopt and implementation the IAEA Syllabus for Education and Training for Radiation Oncologists (IAEA Training Course Series No. 36 \[\rightarrow\] STANDARDIZING CURRICULUM FOR RADIATION ONCOLOGIST IN FARO COUNTRIES

- FARO Scientific and education Meetings
2nd Indian Cancer Congress 2017
Plan to do Council Meeting

Nov 2017, Bangalore

Year 2018: FARO-ESTRO Join Symposium
FARO ESTRO scientific meeting
The mission of FARO is to provide a platform to promote education, research, and scientific exchange in radiation oncology in Asian countries. The cooperation and communication among professionals in radiation oncology and, more importantly, for cancer patients in this region. - Masahiro Hiraoka, MD, PhD

FARO will start by cooperation in education and clinical research in radiation oncology to meet the needs of Asian countries, and, more importantly, for cancer patients in the region. - Takashi Nakano, MD, PhD

COMING TOGETHER IS A BEGINNING; KEEPING TOGETHER IS PROGRESS; WORKING TOGETHER IS SUCCESS.

- Henry Ford

ProGood.me
Website: [www.faroac.org](http://www.faroac.org)
Facebook: [www.facebook.com/faro.organization/](http://www.facebook.com/faro.organization/)

Federation of Asian Organizations for Radiation Oncology

Contact Detail FARO
Secretariat Office:
Address c/o Radiation Oncology,
Graduate School of Medicine, Gunma University
Show Machi 3-339-22. Maebashi-Shi, Gunma-Ken, 371-8511 Japan
Tel +81-027-220-8380
E-mail faro-office@faro.org

For FARO Database: project.computesta.com/faro-db/web
THANK YOU
FARO... Unity In Diversity
In addition to access, wide gaps exist:

- Education and training
- Research
- Treatment protocols
- Technical expertise