

## Annexe A3. Financials

**SPO Paraguay REDD project - Financial Plan Sept 09 version**

Constant 2009 US\$

**Worksheet 1: Capital expenditure**

| Year   | 0         | 1 | 2 | 3 | 4 | 5 | Total     |
|--|-----------|---|---|---|---|---|-----------|
| <b>Phase 1:</b>  |           |   |   |   |   |   |           |
| Definition Phase   | 436,100   |   |   |   |   |   |           |
| <b>Phase 2:</b>  |           |   |   |   |   |   |           |
| <b>Capital Exenditure</b>                                      |           |   |   |   |   |   |           |
| <i>Capped at:</i>  |           |   |   |   |   |   | 4,063,900 |
| <b>Component 1: La Amistad (Atlantic Forest - San Rafael).</b> |           |   |   |   |   |   |           |
| - Land Purchase  |           | 0 |   |   |   |   | 0         |
| - Transaction/Legal costs                                      |           | 0 |   |   |   |   | 0         |
| - <b>Total</b>   |           | 0 | 0 | 0 | 0 | 0 | 0         |
| <b>Component 2: Chaco-Pantanal</b>                             |           |   |   |   |   |   |           |
| - Land Purchase  | 2,400,000 |   |   |   |   |   | 2,400,000 |
| - Transaction/Legal costs                                      | 48,000    |   |   |   |   |   | 48,000    |
| - <b>Total</b>   | 2,448,000 | 0 | 0 | 0 | 0 | 0 | 2,448,000 |

## Notes

Under contract Jan 09.

May include roll-over to Year 1 for validation costs

*i.e. 4,500,000 less Definition Phase expenditure*

Assume US\$ 200/ha

2% transaction costs

**SPO Paraguay REDD project - Financial Plan Sept 09 version**

Constant 2009 US\$

### Worksheet 2: Operating expenditure

| Year  | 0              | 1              | 2              | 3              | 4              | 5                | Total            | Notes   |
|---|----------------|----------------|----------------|----------------|----------------|------------------|------------------|---------|
| <b>Operating Costs</b>  |                |                |                |                |                |                  |                  |         |
| <i>Capped at:</i>   |                |                |                |                |                |                  | <i>2,500,000</i> |         |
| <b>A. Fixed costs</b>   |                |                |                |                |                |                  |                  |         |
| <i>WLT management</i>   |                |                |                |                |                |                  |                  |         |
| - Direct project management   | 60,000         | 60,000         | 60,000         | 60,000         | 60,000         | 300,000          |                  | Based   |
| - WLT Admin   | 20,000         | 20,000         | 20,000         | 20,000         | 20,000         | 100,000          |                  | Based   |
| <i>VCSCCBA Verification</i>   |                |                |                |                |                |                  |                  | Initial |
| - During investment period  |                |                |                |                |                | 40,000           | 40,000           | Based   |
| - Long-term Management Fund   | 24,000         | 24,000         | 24,000         | 24,000         | 24,000         | 120,000          |                  |         |
| <i>Sub-total</i>  |                |                |                |                |                |                  | <i>560,000</i>   |         |
| <b>B. In-country Operations</b>                                       |                |                |                |                |                |                  |                  |         |
| <b><i>Component 1: La Amistad (Atlantic Forest - San Rafael).</i></b> |                |                |                |                |                |                  |                  |         |
| - Management Programme  | 36,600         | 36,600         | 36,600         | 36,600         | 36,600         | 183,000          |                  |         |
| - Community PES   | 47,600         | 47,600         | 47,600         | 47,600         | 47,600         | 238,000          |                  |         |
| - Long-term Management Fund   | 252,600        | 252,600        | 252,600        | 252,600        | 252,600        | 1,263,000        |                  |         |
| <i>Sub-total</i>  | <i>336,800</i> | <i>336,800</i> | <i>336,800</i> | <i>336,800</i> | <i>336,800</i> | <i>1,684,000</i> |                  |         |
| <b><i>Component 2: Chaco-Pantanal</i></b>                             |                |                |                |                |                |                  |                  |         |
| - Management Programme  | 57,200         | 57,200         | 57,200         | 57,200         | 57,200         | 286,000          |                  |         |
| - Community Fund  | 12,000         | 12,000         | 12,000         | 12,000         | 12,000         | 60,000           |                  |         |
| - Long-term Management Fund   | 162,000        | 162,000        | 162,000        | 162,000        | 162,000        | 810,000          |                  |         |
| <i>Sub-total</i>  | <i>231,200</i> | <i>231,200</i> | <i>231,200</i> | <i>231,200</i> | <i>231,200</i> | <i>1,156,000</i> |                  |         |
| <b>Total</b>  |                |                |                |                |                |                  | <b>3,400,000</b> |         |

## Notes

Based on 80% mid-manager post, 50% senior manager

Based on 4% of total budget, rounded.

Initial validation costs covered in Definition Phase budget

Based on 20-30K FSC quote + margin

**SPO Paraguay REDD project - Financial Plan Sept 09 version**

Constant 2009 US\$

**Worksheet 3: La Amistad operating expenditure**

| Year                             | 0 | 1             | 2             | 3             | 4             | 5             | Total          | Notes                                |
|----------------------------------|---|---------------|---------------|---------------|---------------|---------------|----------------|--------------------------------------|
| <b>Management</b>                |   |               |               |               |               |               |                |                                      |
| - Staff                          |   | 17000         | 17000         | 17000         | 17000         | 17000         | 85000          | Extension officer, GP staff member   |
| - Local consultants              |   | 5000          | 5000          | 5000          | 5000          | 5000          | 25000          | Agriculture and sustainable forestry |
| - Running cost                   |   | 4000          | 4000          | 4000          | 4000          | 4000          | 20000          |                                      |
| - Monitoring programme           |   | 8000          | 8000          | 8000          | 8000          | 8000          | 40000          |                                      |
| - Project administration         |   | 2600          | 2600          | 2600          | 2600          | 2600          | 13000          | At 10% project costs                 |
| <b>Sub-total</b>                 |   | <b>36600</b>  | <b>36600</b>  | <b>36600</b>  | <b>36600</b>  | <b>36600</b>  | <b>183000</b>  |                                      |
| <b>Community PES</b>             |   |               |               |               |               |               |                | <b>Sheet 6 for assumptions</b>       |
| - Individual occupiers           |   | 35700         | 35700         | 35700         | 35700         | 35700         | 178500         |                                      |
| - Community funds                |   | 11900         | 11900         | 11900         | 11900         | 11900         | 59500          |                                      |
| <b>Sub-total</b>                 |   | <b>47600</b>  | <b>47600</b>  | <b>47600</b>  | <b>47600</b>  | <b>47600</b>  | <b>238000</b>  |                                      |
| <b>Long-term management fund</b> |   |               |               |               |               |               |                |                                      |
| - Management                     |   | 109800        | 109800        | 109800        | 109800        | 109800        | 549000         |                                      |
| - Community PES                  |   | 142800        | 142800        | 142800        | 142800        | 142800        | 714000         |                                      |
| <b>Sub-total</b>                 |   | <b>252600</b> | <b>252600</b> | <b>252600</b> | <b>252600</b> | <b>252600</b> | <b>1263000</b> |                                      |
| <b>Total</b>                     |   | <b>336800</b> | <b>336800</b> | <b>336800</b> | <b>336800</b> | <b>336800</b> | <b>1684000</b> |                                      |

**SPO Paraguay REDD project - Financial Plan Sept 09 version**

Constant 2009 US\$

**Worksheet 4: Distribution of payments for Environmental Services (PES) - La Amistad**

|                             |  |  |  |              |
|-----------------------------|--|--|--|--------------|
| No. households              |  |  |  | <b>75</b>    |
| Total area (ha) high forest |  |  |  | 300          |
| Protection area (ha)        |  |  |  | <b>275</b>   |
| US\$/ha/yr (protection)     |  |  |  | <b>170</b>   |
| Annual total PES            |  |  |  | 46750        |
| Area (ha) reforestation     |  |  |  | <b>10</b>    |
| US\$/ha/yr                  |  |  |  | <b>85</b>    |
| Annual total PES            |  |  |  | 850          |
| <b>Total PES payments</b>   |  |  |  | <b>47600</b> |

**PES distribution - individs & community US\$**

|                                |  |  |       |            |
|--------------------------------|--|--|-------|------------|
| PES to individual contributors |  |  | 35700 | <b>75%</b> |
| PES to community               |  |  | 11900 | <b>25%</b> |

**A. PES distribution between individuals US\$/ha US\$**

|                 |  |       |         |
|-----------------|--|-------|---------|
| - protection    |  | 127.5 | 35062.5 |
| - reforestation |  | 63.75 | 637.5   |
| - Total         |  |       | 35700   |

**B. PES distribution within community US\$**

|                            |  |  |       |            |
|----------------------------|--|--|-------|------------|
| PES by household*          |  |  | 2380  | <b>5%</b>  |
| Community Associations     |  |  | 4760  | <b>10%</b> |
| Community Investments Fund |  |  | 4760  | <b>10%</b> |
| *Payment per family        |  |  | 31.73 |            |

SPO Paraguay REDD project - Projected Emissions - baseline (no-project) and 'with project'

Annexe A1: San Rafael Project Area (La Amistad)

A. No-Project scenario

|                                   | Area (Ha) |      |           |      | Note | tCO2e/ha |        | Note | tCO2e total |         |
|-----------------------------------|-----------|------|-----------|------|------|----------|--------|------|-------------|---------|
|                                   | 1997      | 2009 | Change/yr | 2030 |      | 2009     | 2030   |      | 2009        | 2030    |
| Stratum                           |           |      |           |      |      |          |        |      |             |         |
| High Forest                       | 661       | 299  | -30       | 15   | 1    | 961.04   | 480.52 | 1    | 287351      | 7184    |
| Low Forest                        | 65        | 50   | -1        | 50   |      | 480.52   | 480.52 |      | 24026       | 24026   |
| Secondary Forest                  | 0         | 0    | 0         | 0    | 2    | 480.52   | 480.52 |      | 0           | 0       |
| Reforestation                     | 0         | 0    | 0         | 0    |      |          | 258    |      | 0           | 0       |
| Agriculture                       | 0         | 344  | 29        | 628  |      | 153      | 153    |      | 52602       | 96038   |
| Grassland                         | 457       | 490  | 3         | 490  |      | 110      | 110    |      | 53905       | 53905   |
| Total                             | 1183      | 1183 |           | 1183 |      |          |        |      | 417884      | 181152  |
| Net change (negative = emissions) |           |      |           |      |      |          |        |      |             | -236732 |

Note

1 - assumes 5% degraded high forest relict in area.

2 - Degradation not taken into account - i.e. clearance assumed to be directly from high forest to agriculture.

B. With-project scenario

|                                   | Area (Ha) |      |           |      | Note | tCO2e/ha |        | Note | tCO2e total |        |
|-----------------------------------|-----------|------|-----------|------|------|----------|--------|------|-------------|--------|
|                                   | 1997      | 2009 | Change/yr | 2030 |      | 2009     | 2030   |      | 2009        | 2030   |
| Stratum                           |           |      |           |      |      |          |        |      |             |        |
| High Forest                       | 661       | 299  | -1        | 275  | 1    | 961.04   | 961.04 | 1    | 287351      | 264286 |
| Low Forest                        | 65        | 50   | -1        | 50   | 2    | 480.52   | 480.52 |      | 24026       | 24026  |
| Secondary Forest                  | 0         | 0    | 0         | 0    |      | 480.52   | 480.52 |      | 0           | 0      |
| Reforestation                     | 0         | 0    | 0         | 10   | 3    |          | 258    | 3    | 0           | 2580   |
| Agriculture                       | 0         | 344  | 29        | 358  |      | 153      | 153    |      | 52602       | 54743  |
| Grassland                         | 457       | 490  | 3         | 490  |      | 110      | 110    |      | 53905       | 53905  |
| Total                             | 1183      | 1183 |           | 1183 |      |          |        |      | 417884      | 399540 |
| Net change (negative = emissions) |           |      |           |      |      |          |        |      |             | -18344 |

Note

1 - assumes 90% take-up of PES and sustainable management system (i.e. arrests degradation but no growth increment)

2 - assumes low forest loss arrested

3 - Assumes reforestation option on 10 ha with 20 year growth increment - but not qualifying on permanence criteria

C. Net Project Benefits (tCO2e delivery)

|                             |  |  |  |  |   |  |  |  |  |        |
|-----------------------------|--|--|--|--|---|--|--|--|--|--------|
| tCO2 benefit                |  |  |  |  |   |  |  |  |  | 218388 |
| Reforestation deduction     |  |  |  |  |   |  |  |  |  | 2580   |
| Net tCO2 e benefit          |  |  |  |  |   |  |  |  |  | 215808 |
| Risk Buffer                 |  |  |  |  | 1 |  |  |  |  | 43162  |
| tCO2 benefit net of leakage |  |  |  |  |   |  |  |  |  | 172646 |
| Leakage deduction           |  |  |  |  | 2 |  |  |  |  | 17265  |
| Attributable benefit (VCUs) |  |  |  |  |   |  |  |  |  | 155382 |

Note

1 - 20% i.e. medium risk rating applied.

2 - 10% i.e. low risk rating applied to net after risk buffer

**SPO Paraguay REDD project - Financial Plan Sept 09 version**

Constant 2009 US\$

**Worksheet 6: Chaco-Pantanal operating expenditure**

| Year                             | 0 | 1             | 2             | 3             | 4             | 5             | Total          | Notes  |
|----------------------------------|---|---------------|---------------|---------------|---------------|---------------|----------------|--|
| <b>Management</b>                |   |               |               |               |               |               |                |  |
| - Staff                          |   | 17000         | 17000         | 17000         | 17000         | 17000         | 85000          | GP staff member - training & site management |
| - Running cost                   |   | 25000         | 25000         | 25000         | 25000         | 25000         | 125000         |  |
| - Monitoring programme           |   | 10000         | 10000         | 10000         | 10000         | 10000         | 50000          |  |
| - Project administration         |   | 5200          | 5200          | 5200          | 5200          | 5200          | 26000          | At 10% project costs                         |
| <b>Sub-total</b>                 |   | <b>57200</b>  | <b>57200</b>  | <b>57200</b>  | <b>57200</b>  | <b>57200</b>  | <b>210000</b>  |  |
| <b>Community Fund</b>            |   |               |               |               |               |               |                | <b>Sheet 6 for assumptions</b>               |
| Payment/ha                       |   | 12000         | 12000         | 12000         | 12000         | 12000         | 60000          | US\$ 1/ha/yr                                 |
| <b>Sub-total</b>                 |   | <b>12000</b>  | <b>12000</b>  | <b>12000</b>  | <b>12000</b>  | <b>12000</b>  | <b>60000</b>   |  |
| <b>Long-term management fund</b> |   |               |               |               |               |               |                |  |
| - Management                     |   | 126000        | 126000        | 126000        | 126000        | 126000        | 630000         |  |
| - Community Fund                 |   | 36000         | 36000         | 36000         | 36000         | 36000         | 180000         |  |
| <b>Sub-total</b>                 |   | <b>162000</b> | <b>162000</b> | <b>162000</b> | <b>162000</b> | <b>162000</b> | <b>810000</b>  |  |
| <b>Total</b>                     |   | <b>231200</b> | <b>231200</b> | <b>231200</b> | <b>231200</b> | <b>231200</b> | <b>1080000</b> |  |

**SPO Paraguay REDD project - Financial Plan Sept 09 version**

Constant 2009 US\$

**Worksheet 7: Chaco Pantanal tCO<sub>2</sub>e delivery**

| Strata*                 | Area (ha)    | %          | tC/ha | tC area       | tCO <sub>2</sub> e | Notes  |
|-------------------------|--------------|------------|-------|---------------|--------------------|--|
| High Forest             | 7200         | 60         | 43    | 309600        | 1135303            | Ranges from 30-60 tC/ha woody above/below>10cm dbh |
| Low Forest              | 3000         | 25         | 25.8  | 77400         | 283826             | Assume 40% of high forest value                    |
| Grassland               |              | 15         |       |               |                    | Assume C stocks remain unaltered                   |
| <b>Total</b>            | <b>12000</b> | <b>100</b> |       | <b>387000</b> | <b>1419129</b>     | tCO <sub>2</sub> e/ha                              |
| Total woodland          | 10200        |            |       | 387000        | 1419129            |  |
| Statutory Reserve       | 2550         |            |       | 96750         | 354782             | 25% of whole parcel applied to forested part       |
| Attributable to project |              |            |       | 290250        | 1064347            |  |
| Risk Buffer             |              |            |       | 29025         | 106435             | Taken at 10%                                       |
| Leakage Buffer          |              |            |       | 29025         | 106435             | Taken at 10%                                       |
| <b>Net Benefit</b>      |              |            |       | <b>232200</b> | <b>851477</b>      | Assumes complete clearance in 20 years             |

\* Relative forest areas approximate to the Puerto Ramos example.

**SPO Paraguay REDD project - Financial Plan Sept 09 version**

Constant 2009 US\$

**Worksheet 8: Summary of deliverable and costs**

| Site           | Delivery tCO <sub>2</sub> e |                  | Cost (US\$)      |                  |                  |                       |
|----------------|-----------------------------|------------------|------------------|------------------|------------------|-----------------------|
|                | Net                         | After            | Capital          | Operating        | Total            | Cost/tCO <sub>2</sub> |
|                | Benefit                     | Deductions       |                  |                  |                  |                       |
| Chaco Pantanal | 1,064,347                   | <b>851,477</b>   | 2,448,000        | 1,156,000        | 3,604,000        | 4.23                  |
| Amistad        | 218,388                     | <b>155,382</b>   | 0                | 1,684,000        | 1,684,000        | 10.84                 |
| Fixed costs    |                             |                  |                  | 560,000          | 560,000          |                       |
| <b>Totals</b>  | <b>1,282,735</b>            | <b>1,006,859</b> | <b>2,448,000</b> | <b>3,400,000</b> | <b>5,848,000</b> | <b>5.81</b>           |