# Peace Dividend Marketplace Timor-Leste Micro Matchmaking Impact Assessment Report:

# Lautem



A Report By:

Peace Dividend Trust
Scott McCord
Dili, Timor-Leste
timor-leste@pdtglobal.org
January 2011



# **Table of Contents**

Τa	able of Contents and Acknowledgement:	i
E	secutive Summary	. iii
1.	Introduction	1
2.	Micro Matchmaking Impact Assessment Overview	1
3.	Micro Matchmaking	2
4.	The Results	3
	4.1 Baucau District Overview	4
	4.2 Timeline of Matches Closed over \$1,000	4
	4.3 FiveRepresented Sectors	5
	4.4 Employment Landscape Prior to Matchmaking Involvement	6
	4.5 Jobs Created	7
	4.6 Jobs Matched	9
	4.7 Tracking Income Derived from Matchmaking	9
	4.8 A Story from the Field	11
5	Conclusion	11

# Acknowledgement

The Peace Dividend Marketplace Timor-Leste project is supported with generous contributions from the Arsenault Family Foundation, AusAid, the Canadian Fund for Local Initiatives, and Eni. Micro matchmaking in Lautem was made possible with support from AusAid and Eni.



# **Executive Summary**

Peace Dividend Trust (PDT) is a unique non-profit organization, dedicated to making peace and humanitarian operations more effective and equitable so that they deliver cheaper, faster, smarter missions – resulting in a stronger peace and a larger peace dividend. The Peace Dividend Marketplace projects, designed to facilitate local procurement and increase market awareness, are instrumental tools in achieving these objectives. PDT currently has marketplace projects in three countries across the globe: Afghanistan, Haiti and Timor-Leste.

This report presents the findings of the Peace Dividend Marketplace Timor-Leste (PDM-TL) impact assessment survey on micro matchmaking activities in the district of Lautem. Data was collected for matches closed over \$1,000 and analyzed as to the impact on job creation and the local private sector (all monetary values are reported in US dollars). A total of 114 separate transactions were analyzed, which were valued at a total of \$251,885. These transactions range across a total of five sectors. The three sectors with the highest dollar values are: Primary Industry (Including Agriculture and Fisheries), Real Estate and Insurance, and Construction and Heavy Equipment.

Key Findings of Lautem Impact Assessment Study							
Total Number of Jobs	 Created	94					
Male	91	Female	3				
Permanent	18	Temporary	76				
Skilled	48	Unskilled	46				
Number of Individuals	Matched to a Job	84					
Opportunity							
Number of Instances Funds Generated through Matchmaking were Spent on:							
Education		48					
Equipment		25					
New Business Ventures		16					
Personal Needs / Wants		166					
Sectors with the Highe	st Value Transactions	Total Value					
Primary Industry (Includ	ling Agriculture and	\$2	211,160				
Fisheries)							
Real Estate and Insurance	ce	\$25,560					
Construction and Heavy Equipment		\$11,085					

The report provides the context and methodology used for data gathering. The results indicate that the PDM-TL project has promoted private sector development, created jobs, and stimulated the economy at the district level and across the country.

The micro matchmaking impact assessment report series will conclude with an aggregate report with analysis of PDM-TL results across the 9 districts where PDT has provided micro matchmaking. Coinciding with this series will be an impact assessment study and report on the Tender Distribution Service (TDS). TDS works with larger businesses that typically win larger value contracts and operates primarily in Dili, Timor-Leste's capital.



#### 1. Introduction

According to a World Bank report published in 2007, Timor-Leste's formal economy created 400 jobs per year for approximately 20,000 school leavers. Two years later the country's youth unemployment rate (ages 15-29), particularly in the district centers, is cripplingly high. Timor-Leste currently has an estimated unemployment rate of above 20% in rural areas, with the unemployment rate as high as 43% in urban centers. Without specific programs targeted to develop the private sector and create jobs, economic stagnation will continue to be a serious problem for the country's well being.

The work accomplished by Peace Dividend Trust (PDT) through its marketplace project is aligned to address the disparity between the number of job seekers and the number of jobs available. Peace Dividend Marketplace Timor-Leste (PDM-TL) is underpinned by the philosophy that helping businesses win business helps establish a sustainable private sector. With a sustainable private sector providing lasting job opportunities, progress towards a secure and enduring peace can be solidified.

# 2. Micro Matchmaking Impact Assessment Overview

For over two years, Peace Dividend Trust has provided matchmaking services to micro businesses in Timor-Leste, through its Peace Dividend Marketplace project. This service is intended to fill the informational gap between those seeking to buy and those seeking to sell goods and services and, by enhancing the flow of information between buyers and sellers, to create opportunities for private sector growth and job creation.

Historically PDT has monitored the success of the program by tracking the total dollar value of each transaction facilitated, as well as the total number of transactions. While this offers a useful depiction of the monetary value provided by the service to Timorese businesses, it is by no means a comprehensive measure of the service's overall impact on the local economy. This is one of several reports that will broaden PDT's impact assessment by probing deeper into the benefits of micro matchmaking on the business communities where it operates. For the purposes of this report, micro matchmaking refers to all non Dili based matchmaking activities, or the linking of a buyer to a supplier which facilitates a transaction where money is exchanged for goods or services. This report on Lautem is one sample of the impact the program has had at the district level. PDT has already published a report on the impact of matchmaking activities in Baucau<sup>3</sup> and will publish an aggregate report that synthesizes information from all nine micro matchmaking districts.

Drawing on a tested survey used by the Peace Dividend Marketplace Afghanistan project to measure job creation in Helmand province, Peace Dividend Marketplace Timor-Leste (PDM-TL) developed a survey to assess the impact of its micro matchmaking program on job creation and private sector growth. Appropriate modifications from the Afghanistan survey were made to

<sup>&</sup>lt;sup>1</sup>The World Bank Group and the Asian Development Bank, in consultation with Development Partners, *Economic and Social Development Brief*, August 2007, page 3.

<sup>&</sup>lt;sup>2</sup>Secretaria de Estado da FormaçãoProfissional e Emprego (SEFOPE), *Timor-Leste National Youth Employment Action Plan (NYEAP) 2009*, 2009, page 4.

<sup>&</sup>lt;sup>3</sup> See http://www.peacedividendtrust.org/en/Baucau\_Impact\_Report.html



adapt to micro level businesses as well as other conditions specific to Timor-Leste's economic environment.

A survey of this kind faces several challenges. First, due to the amount of time that has passed between the completion of a match and the survey interview dates, the information gathered reflects what the interviewee could remember at present, which may have changed slightly from the past results. Second, the country's lack of infrastructure (namely poor road conditions and limited telecommunication reach) has made it difficult for surveyors to relocate and make contact with suppliers living outside the district hubs.

Third, many of the suppliers involved in these matches are individual entrepreneurs, not necessarily registered businesses, who have since changed their residence or phone numbers (a number of individuals, particularly in the rural regions, had no phones to begin with). As such, the PDT surveyors were unable to track down a portion of the intended interviewees and several transactions that were initially targeted to be analyzed could not be evaluated. The success rates of interviews vary from district to district. In Lautem, where most suppliers were spread across the district, surveyors received feedback from 64% of the matches. Despite the challenges, the information offers valuable insight into the impact of the business matchmaking program in Timor-Leste, if viewed as a sample of the overall data.

The data provides largely unprecedented information outlining the types of business opportunities that exist at the district level. The report looks past the monetary value of each match by describing what type of matches were most prevalent, how many jobs have been matched or created, and how the money earned from each match has been spent.

# 3. Micro Matchmaking

Peace Dividend Marketplace Timor-Leste began its micro matchmaking program in 2008 after witnessing high demand for a service that would connect local supply to demand from international actors working in Timor-Leste. Navigating the local marketplace in the country's rural districts can leave international institutions and individuals frustrated by the lack of up-to-date market information and the idiosyncrasies of each area's marketplace. The matchmaking service is the missing link between district suppliers and potential buyers. The matchmaker's familiarity with the local market and understanding of both parties' needs greatly facilitates local purchasing in the districts. Local purchasing in turn generates several benefits for the district economy.

The service has evolved since its inception as the needs and types of business transactions have changed. One noticeable difference is that the matchmaking program now includes national buyers, rather than just international institutions or personnel, in its list of clients. The 2006 crisis had a devastating effect on the country, essentially destroying longstanding networks across Timor-Leste. By connecting, or at times reconnecting, national buyers and national suppliers, the matchmaking program is strengthening sustainable business relationships within Timor-Leste. In Lautem in particular, a high number of transactions in Primary Industry (Including Agriculture and Fisheries) occurred with national buyers. Recently, in the border districts a special focus has been placed on cross border trade with the country's largest trading partner, Indonesia.

Since its creation in 2008, the rural matchmaking program has directed just under \$8 million to locally owned businesses (all monetary values are reported in US dollars). Over 12,800 unique business transactions have been facilitated to achieve this sum across 9 districts: Ainaro, Baucau,



Bobonaro, Covalima, Lautem, Manatuto, Manufahi, Oecusse and Viqueque. Unfortunately, due to funding constraints, PDM-TL suspended its matchmaking services in the districts of Baucau and Manatuto at the end of September 2010. Services in Ainaro, Manufahi and Lautem were suspended earlier in 2010. Unless further funding is secured, all matchmaking activities in the districts will be closed down at the end of March 2011.

#### 4. The Results

All data was gathered from matches closed over \$1,000, as the PDM-TL team deemed this an appropriate sum to expect tangible, measurable results.

The reports focus on the effects of the PDM-TL project on employment, as job creation is one of PDT's key objectives. As mentioned in the introduction, Timor-Leste's employment rate is estimated to be above 20% in rural areas, reaching as high as 43% in urban centers.<sup>4</sup>

In this report, employment created through PDM-TL facilitation is measured in two ways: 1) Jobs created and 2) Jobs matched. The first reflects an instance in which a transaction has required, or allowed, a business owner to hire additional labor, hence creating a job that did not exist before. The second reflects an instance in which a project or an employer was seeking labor and the matchmaker found a suitable candidate(s) to fill the position, hence matching a job seeker with a job.

The report differentiates laborers in three ways. The first differentiation is by gender. The second makes a distinction between skilled and unskilled workers. For the purposes of the survey, skilled workers represent all laborers who had received education at, or above, the secondary level or had received job-specific training. Unskilled workers represent all workers who had not completed secondary education or received specialized training. The third differentiation breaks down the duration of each labor contract to permanent and temporary. Permanent workers are expected to stay at the job for over 6 months, while temporary workers are expected to complete their contract prior or at the 6-month mark.

Although this impact assessment report focuses on the largest transactions, it is important to note that the regions in which they take place are still relatively less developed compared to the country's capital, Dili. According to the International Labor Organization, "around 70% of the population of Timor–Leste lives in the rural areas where the incidence of poverty is high as compared to that in the urban centers. As a result, almost 90% of the poor are in rural areas and poverty has become primarily a rural phenomenon." When reviewing this information, it is important to remember that every job matters and even small dollar amounts can go along way into alleviating poverty and generating business.

<sup>&</sup>lt;sup>4</sup>Secretaria de Estado da FormaçãoProfissional e Emprego (SEFOPE), *Timor-Leste National Youth Employment Action Plan (NYEAP) 2009*, 2009, page 4.

<sup>&</sup>lt;sup>5</sup>International Labour Organization, *Timor-Leste: Decent Work Country Programme 2008-2013*, June 2009, page 5.



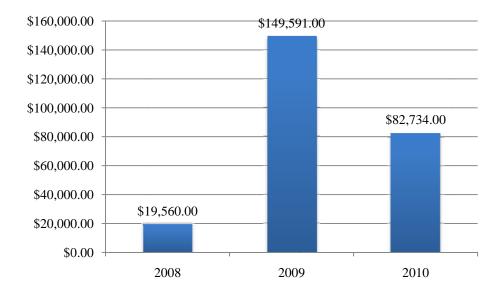
#### 4.1 Lautem District Overview

District Breakdown			
Matchmaking Date Founded	March 2008		
Closing Date	July 2010		
Reporting Period	March 2008 – July 2010		
Dollars Facilitated	\$638,419.10		
Total Number of Transactions Closed	799		
Average Dollar Amount per Transaction	\$799.02		
Transactions Counted for Impact Assessment	<sup>6</sup> 114		
Number of Interviews Conducted	<sup>7</sup> 191		
Value of Counted Transactions	\$251,885		

# 4.2 Timeline of Matches Closed over \$1,000

Both the number and value of transactions fluctuated between the district's three operational years. The highest number and value of matches was closed in 2009, resulting in \$149,591 facilitated through 71 matches. Only four matches were closed in 2008, resulting in a total value of \$19,560. (Six other matches eligible from 2008 were not interviewed, and two additional matches were jobs matched, which is not included in this portion of the data.) In 2010 activities were on track to achieve results similar to the previous year, but the district's matchmaking program was closed in July 2010. As a result, only 37 matches were closed, worth \$82,734.

Figure 1: Value of Matches per Year



<sup>&</sup>lt;sup>6</sup> 114 matches were surveyed out of an eligible 180.

<sup>&</sup>lt;sup>7</sup> A number of transactions required multiple surveys, as the matchmakers sourced products and services from multiple suppliers, who each utilized the revenue generated in different ways. (On some occasions, not all suppliers involved in a match could be interviewed.)

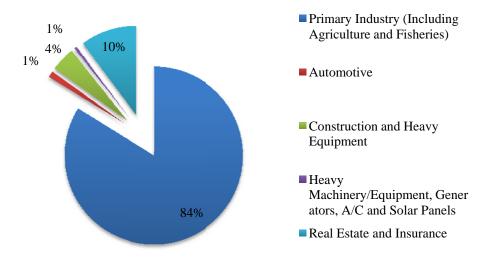


# 4.3 Five Represented Sectors

PDM-TL categorizes the types of matches closed by sector. The project utilizes a total of 26 sectors to differentiate business activity across the country. The matches closed in Lautem were distributed across 5 of these sectors. The sectors are as follows in order of value, highest to lowest: Primary Industry (Including Agriculture and Fisheries); Real Estate and Insurance; Construction and Heavy Equipment; Automotive; and Heavy Machinery/Equipment, Generators, A/C and Solar Panels.

Figure 2 presents the spread across sectors, the percentages being derived from the dollar value of each match.

Figure 2: Sectors of Matches above \$1,000 in Lautem District



The majority of matches facilitated in Lautem revolved around the district's robust cattle trade. Out of the 114 matches accounted for in this report, 101 matches were in the Primary Industry (Including Agriculture and Fisheries) sector. Of these 101 matches, only 5 represented a product other than cattle.

The "karau", or cow, is not only an integral part of Timor-Leste's economy, but also an integral part of the country's culture. Cattle often function as a type of currency, changing hands in large quantities to pay for events ranging from weddings to funerals. Although these types of transactions are common in Timor-Leste, they do not necessarily contribute to the country's economic development. Instead, the Lautem matchmaking team focused on cattle transactions with several buyers who act as middlemen by buying, transporting and then selling the cattle in Dili. This form of trade is valuable because it helps direct money from the capital to areas of the country that have far fewer income generation opportunities.

To deliver the quantities of cattle that the middlemen requested, the Lautem matchmaking team worked with over 100 cattle suppliers. As a result, the team spent far greater time traveling across the district's deteriorated roads in search of cattle suppliers than their counterparts in some other districts.



Apart from the high number of cattle matched, the district's results are typical of matchmaking in districts across the country. The construction and real estate sectors provided opportunities to companies and landowners to increase profits and expand their businesses. Entrepreneurs renting cars to an International Labor Organization (ILO) project accounted for the high valued Automotive sector.

Sector Breakdown					
Sector	Number of Matches	Value of Matches			
Primary Industry (Including Agriculture and Fisheries)	101	\$211,160			
Real Estate and Insurance	5	\$25,560			
Construction and Heavy Equipment	4	\$11,085			
Automotive	3	\$2,880			
Heavy Machinery/Equipment, Generators, A/C and Solar Panels	1	\$1,200			

The spread of sectors for all matches, regardless of the value, follows the spread of sectors for matches over \$1,000 that were assessed for this report. Primary Industry (Including Agriculture and Fisheries), with a total of 236 matches, accounts for \$381,469 of all matchmaking transactions in Lautem. Construction and Heavy Equipment follows in value with \$159,400 worth of transactions, but leads with the most transactions facilitated at 270 transactions. Real Estate and Insurance was the third highest grossing sector, with \$29,150 facilitated derived from 10 matches. Sixteen out of 26 other sectors were represented in the total spread of Lautem matchmaking data.

#### 4.4 Employment Landscape Prior to Matchmaking Involvement

Prior to the matchmaking transactions, the aggregate number of unique jobs among PDM-TL supplier clients, including business owners, was 176. This means that of all the businesses in Lautem for which PDM-TL facilitated matches over \$1,000, there were 176 people employed or active leading up to the matchmaker's intervention. Of these 176 persons, 90% were male (159) and 10% were female (17), and 17% of persons were classified as skilled labor (30) while 83% were classified as unskilled labor (146).



Male vs. Female Skilled vs. Unskilled

Figure 4: Number of Employed Persons in the Lautem Sample Prior to Matchmaking Involvement

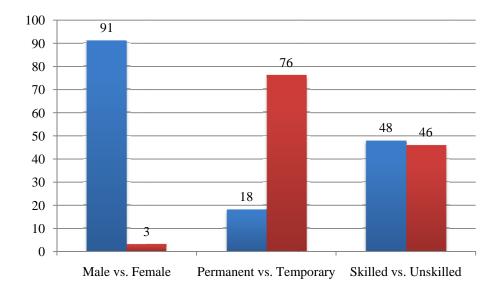
#### 4.5 Jobs Created

The funds generated through matchmaking activities valued over \$1,000 created 94 unique jobs that did not exist before PDM-TL's matchmaking intervention. This represents a total increase of 53% in the number of people employed by the businesses surveyed for this report. This particular data was compiled from a survey question that asked employers to state whether they had to, or were able to, hire additional labor because of the new contract. It is important to note however that not all jobs created were long term positions. Particularly in the agricultural sector, temporary laborers were often hired to help round up and transport the cattle. These laborers worked for varying lengths of time depending on the quantity of cattle sold and the needs of their employers.

Figure 5 outlines the spread between male and female workers, between permanent and temporary jobs, and between skilled and unskilled jobs. The number of women was exceedingly low, with only 3 positions created filled by female laborers. This is likely due to the nature of the matches, revolving primarily around typically male dominated industries (the cattle trade and construction projects). One woman was hired to help look after a rental house, one hired in regards to a large sale of copra, or coconut shells, and one was hired in regards to a cattle transaction. There were 18 permanent laborers hired and 76 temporary laborers. Roughly half of the new jobs were filled by skilled laborers and half by unskilled laborers.



Figure 5: Spread of Jobs Created

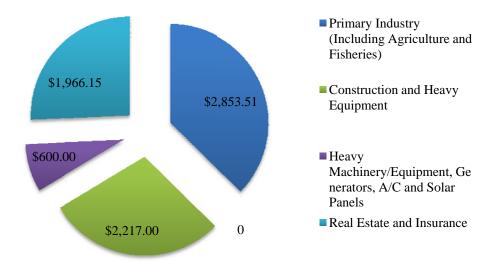


Jobs were created in four of the five sectors represented in this survey. The Automotive sector was the only sector in which no new jobs were created as a result of PDT facilitated matches. Primary Industry (Including Agriculture and Fisheries) introduced 74 new jobs into the economy.

Figure 6 shows the dollar value of the four sectors where jobs were created divided by the number of jobs created. This shows the average amount of money required per sector to create one job. The sector with the lowest cost to job creation ratio is Heavy Machinery/Equipment, Generators, A/C and Solar Panels, which includes home essentials and furniture. One match is represented in this data, where two permanent workers were hired resulting from an order of 30 tables. It is important to note, however, that these conclusions are drawn only from the PDM-TL sample data; capital required to create a job in each sector could be much higher or much lower in practice.



Figure 6: Average Cost to Create One Job per Sector



#### 4.6 Jobs Matched

The Lautem matchmaking team matched 84 job seekers to job opportunities over the duration of the project. These employment opportunities arose from 12 matches valued over \$1,000 (which are not accounted for in the other sections of this report). Seven out of 12 of these matches were in the Construction and Renovation sector, granting 70 job recipients short term, labor-intensive work. Apart from construction work, carpentry enterprises in Lautem were the second highest recipients of new laborers. A project manager for a construction project and several security guards were also matched with job opportunities. Overall, this data indicates abundant work opportunities in construction and manual labor, yet few elsewhere.

#### 4.7 Tracking Income Derived from Matchmaking

While the central discussion of the impact assessment interviews involved job creation, interviewees were also asked how they utilized revenues generated by the matches. Most participants were quite candid in their responses, offering a better understanding of the depth of impact the matchmaking service has had, not only on the business owners and the labor force, but on their families and communities as well. The interviewees responded on a match-by-match basis, so if they had received assistance with more than one match, they answered this question multiple times. The majority of responses can be organized into four categories: Education, Equipment, New Business Ventures and Personal Needs/Wants. The first three of these categories represent investment in either human or physical capital and are thus contributing to further economic growth in the district. Figure 7 shows a spread of the data.



180 166 160 140 120 100 80 60 48 40 25 16 20 0 Education Equipment **New Business** Personal Needs/Wants Ventures

Figure 7: Reinvestment Spread

#### Education

Twenty five percent of the suppliers interviewed allocated a portion of the funds generated to the education of their children. Many of these instances consisted of sending a son or daughter overseas to attend university in either Europe or Indonesia. Others used the funds to send children to primary or secondary school within the country.

#### Equipment

Twenty-five out of 191 suppliers interviewed indicated that they were able to either upgrade or purchase equipment after receiving the match. Several of the guesthouse owners interviewed explained that they purchased new furnishings, and in a few instances built new rooms, for the house. Suppliers in the cattle industry responded that they constructed holding areas and fences for the livestock.

#### New Business Ventures

The number of suppliers that invested funds in a new business was relatively small, consisting of only eight percent of the total respondents. Similar to other districts, the businesses were often small kiosks, which are family run shops that sell general food and beverage products and daily necessities. Several of these, due to lack of resources or poor management, have since shut down.

#### Personal Needs/Wants

The majority of the suppliers responded that the funds generated by the matches were used for personal or family consumption. Similar to the findings in Baucau, successful matches (particularly of cattle) enabled many owners to host a wedding or another celebratory event that would not have been possible otherwise.



# 4.8 A Story from the Field

Cattle owners often cite several difficulties when trying to buy and sell their product. The most common of these can be divided into two categories: transportation and access to market information. The first can be difficult to arrange, as road conditions, proper vehicles (most cows are loaded into the back of dump trucks), and weather can be significant obstacles. The other issue, lack of market information, is what the PDM-TL matchmaking service aimed to address.

The Lautem matchmaking team found several entrepreneurs who were willing to brave these obstacles and purchase cattle in large quantities. For Antonio da Costa Bareto from Lautem town, the cattle trade has been a significant source of profit. In total, Mr. Bareto has bought over \$270,000 worth of cattle in the two years of the project's operation, receiving matchmakers' assistance with over 100 matches. After completing a transaction, Mr. Bareto organizes for the cattle to be transported and sold in Dili.

With revenue generated from his success in the cattle industry, Mr. Bareto opened a small business in August 2009 named Atis that manufactures concrete blocks. As the construction industry in Lautem grows, his business expands. He currently lives in Lautem and is still active in the cattle trade while he manages his new business.

#### 5. Conclusion

The findings of this study provide a closer look at the impact of PDM-TL's micro matchmaking service. The district of Lautem, as shown through the data collected in 191 separate interviews, has experienced job creation as well as investment in education and short and long term capital.

The micro matchmaking program remains one of Peace Dividend Marketplace's most valuable contributions to building the local economy. One of the reasons for its success is that it concentrates on micro businesses, where even the smallest of matches can make a significant difference, especially when the majority of people living in the districts survive on less than a dollar a day.